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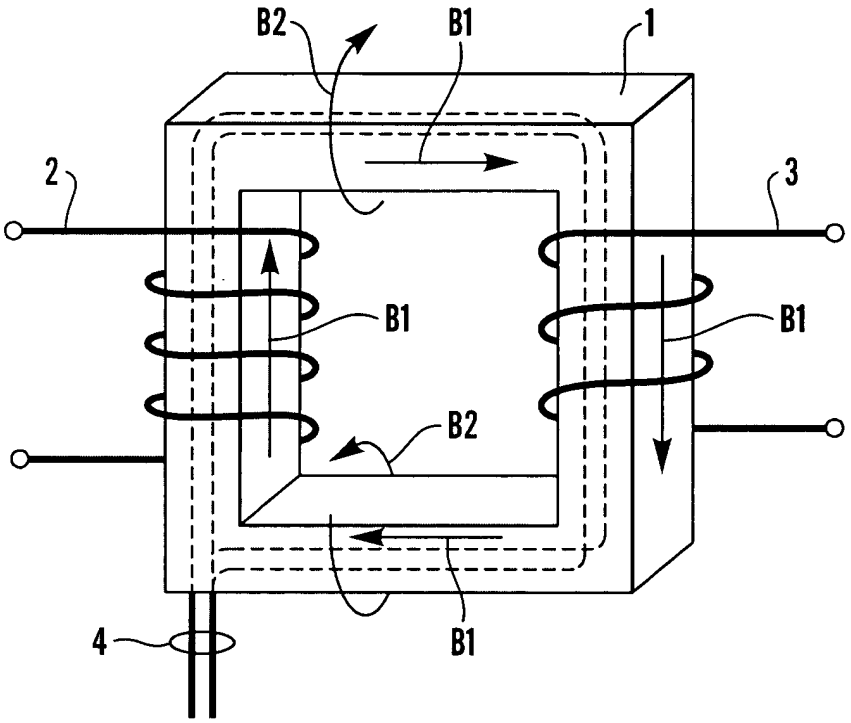


Fig. 1a

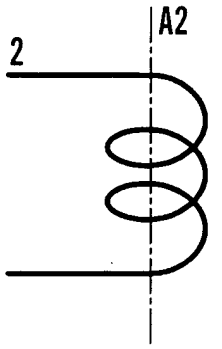
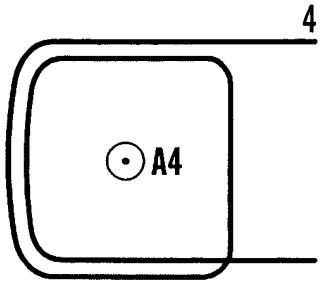


Fig. 1b



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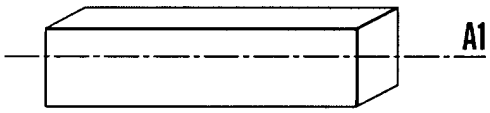
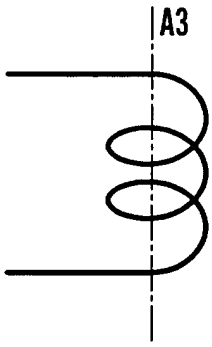


Fig. 1d



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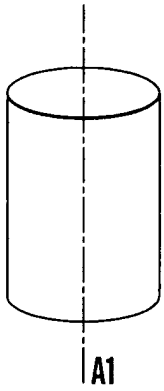

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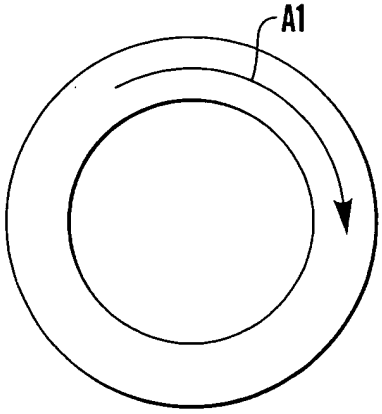

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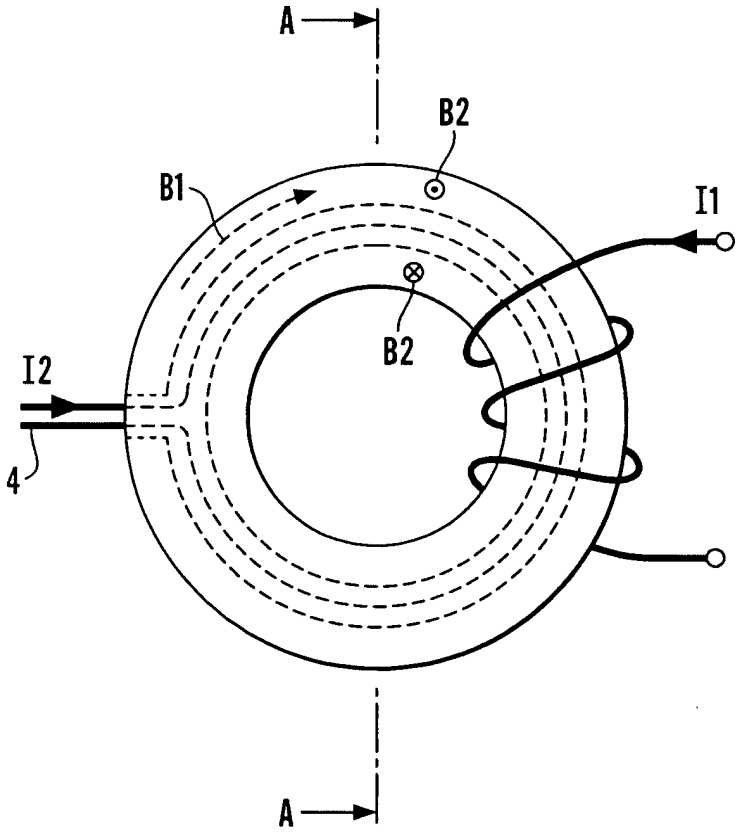
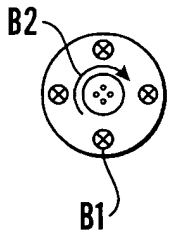
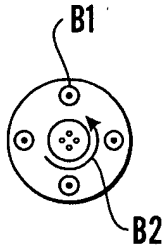


Fig.2a

Fig.2b





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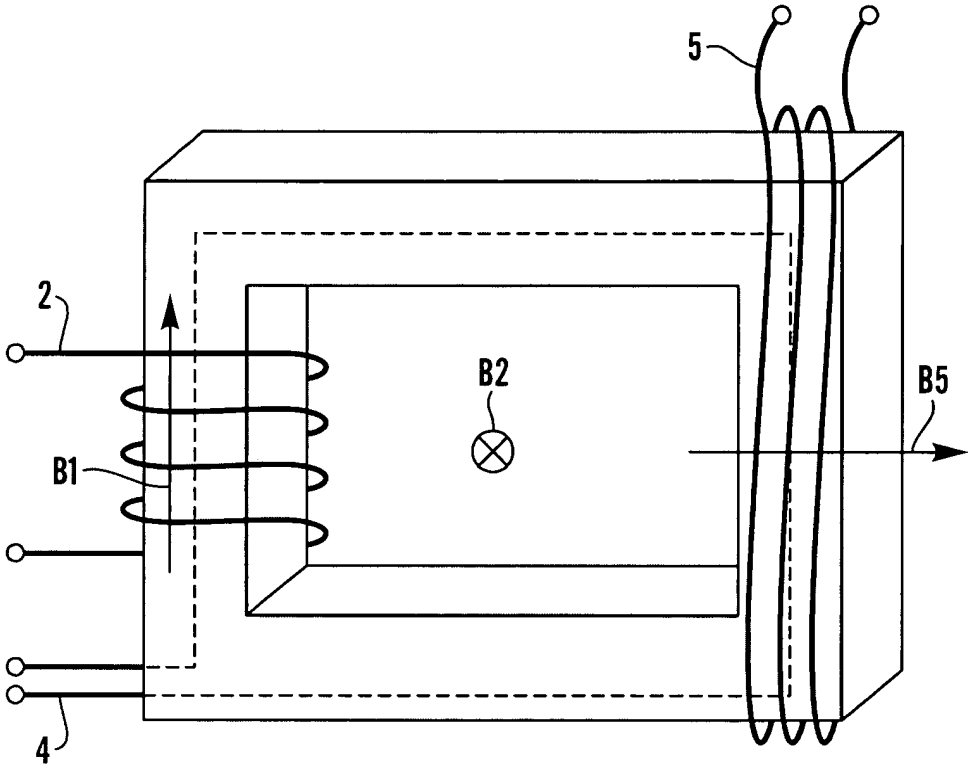
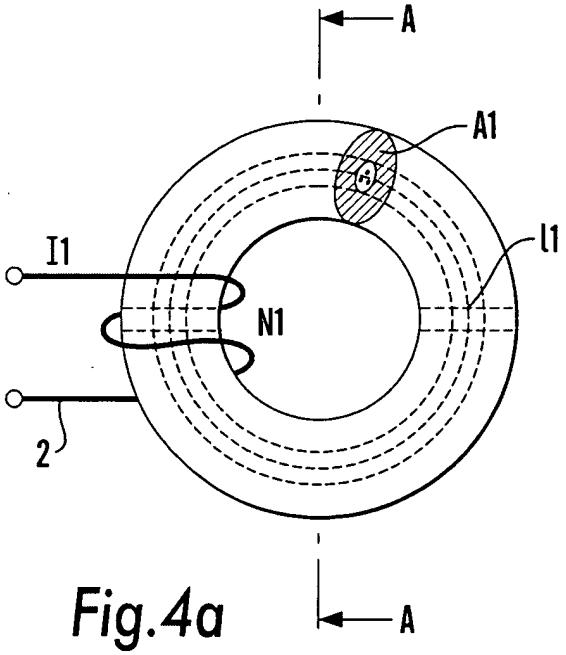


Fig.3



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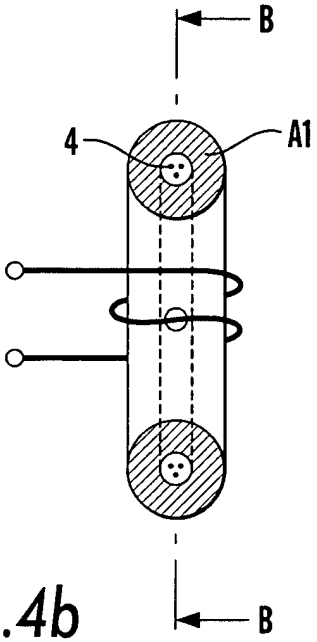

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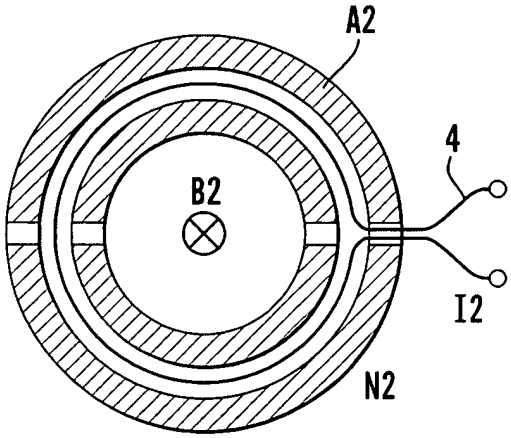

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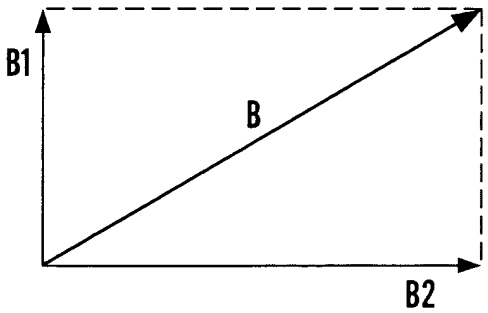


Fig.4d

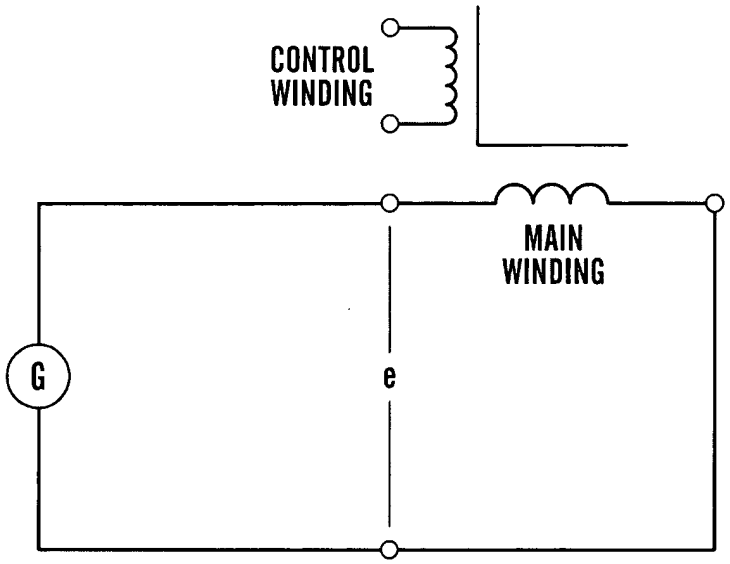


Fig.5a

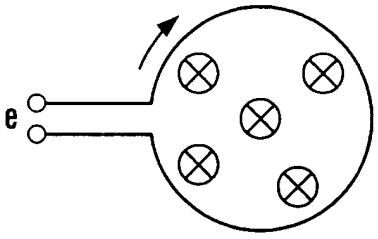
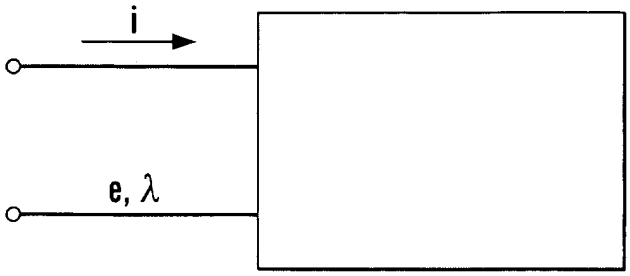


Fig.5b



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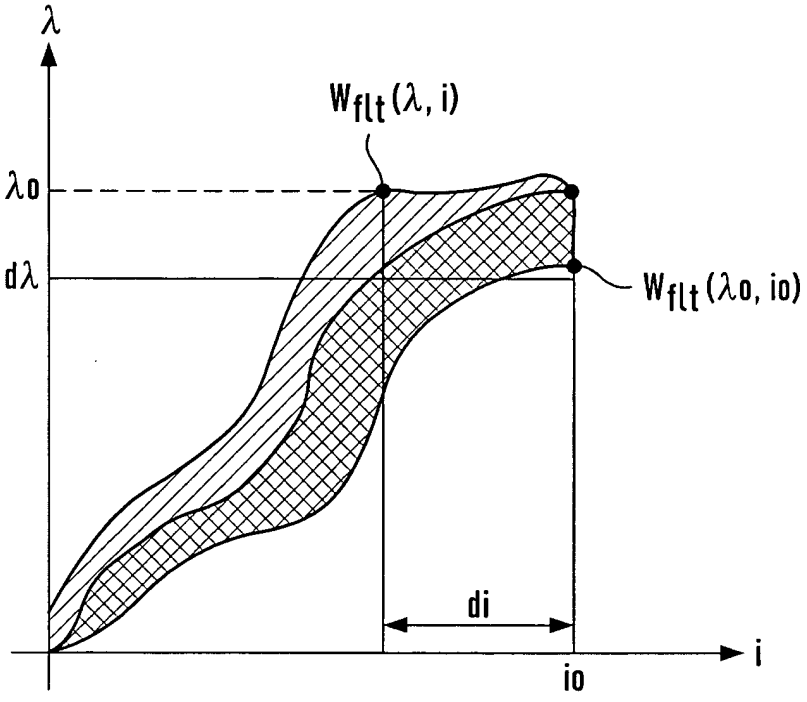

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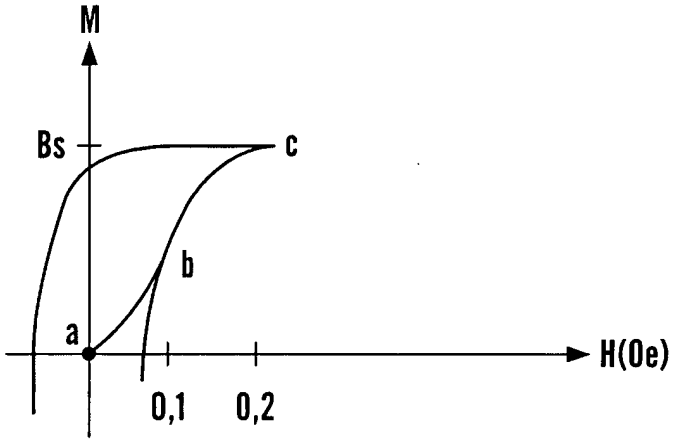

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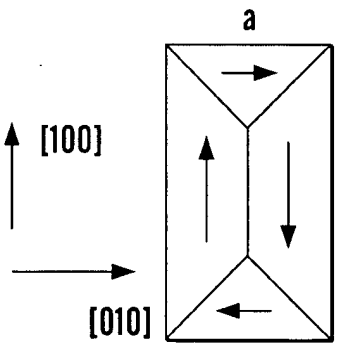

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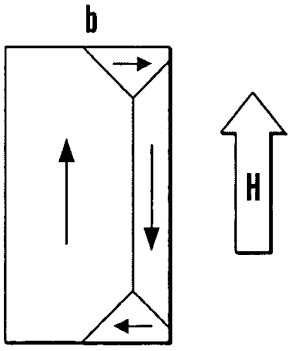

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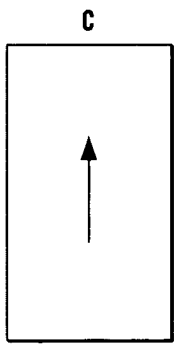

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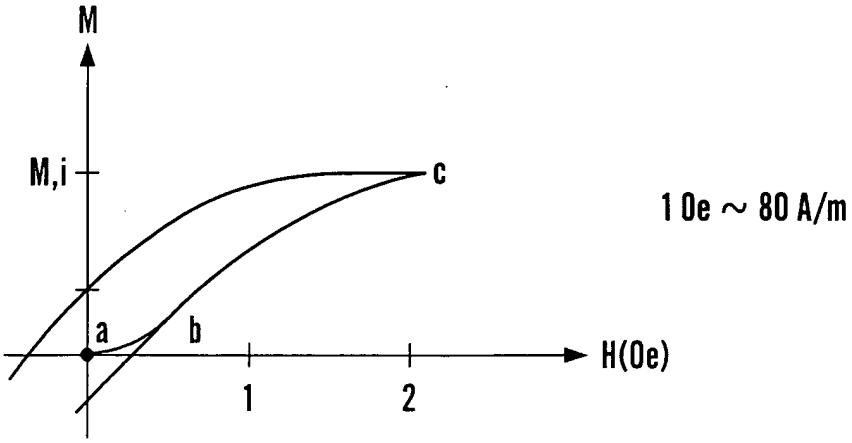

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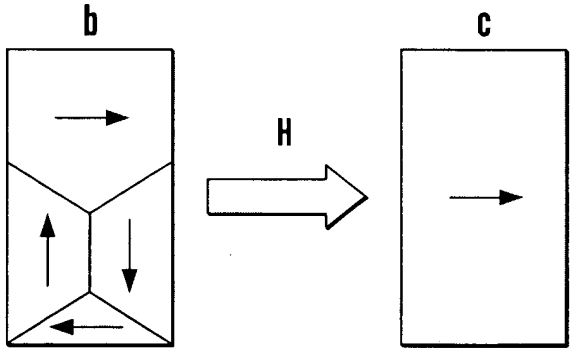

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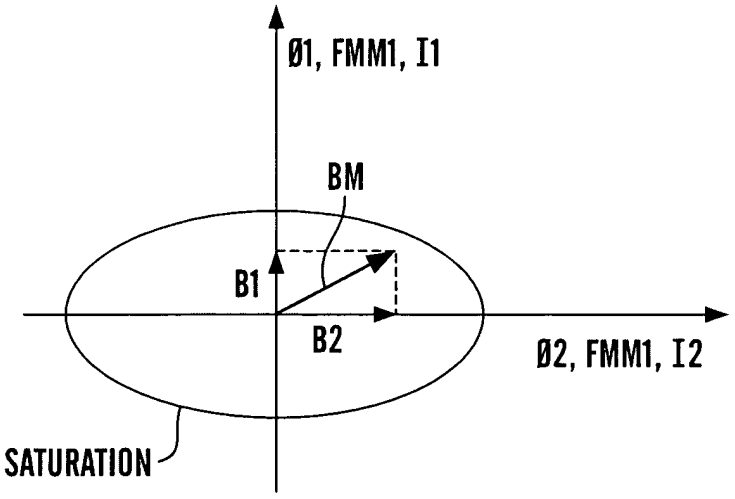

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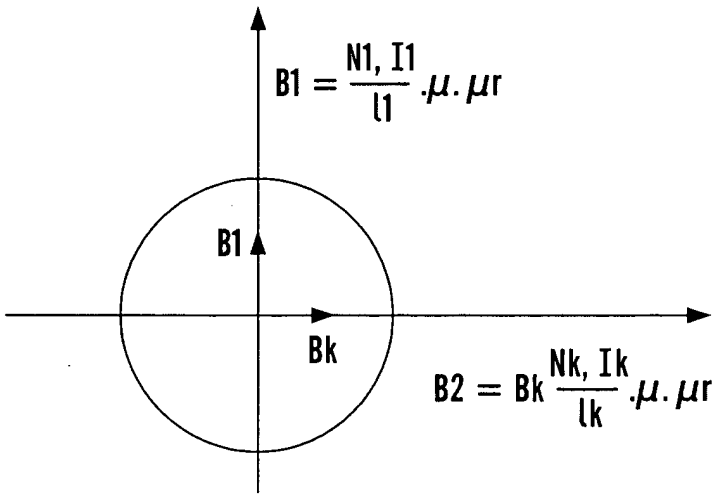

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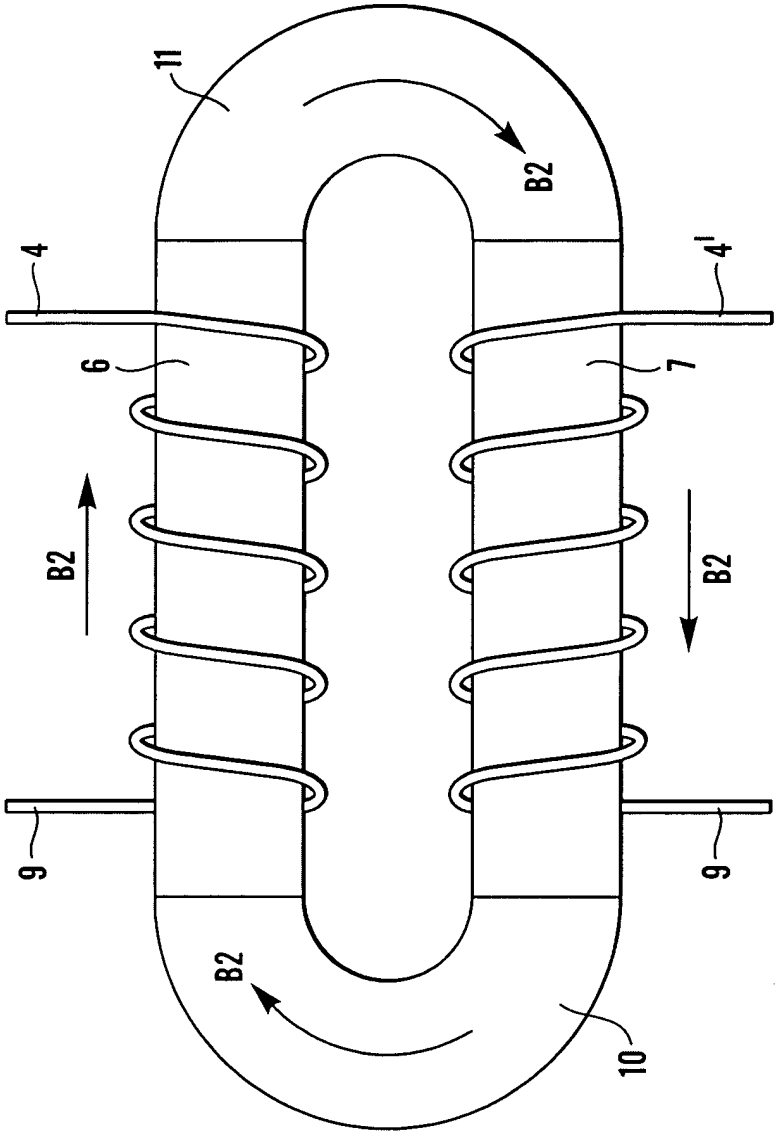

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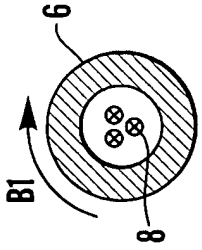

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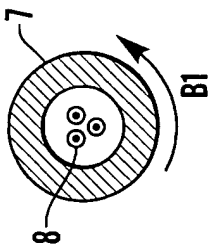

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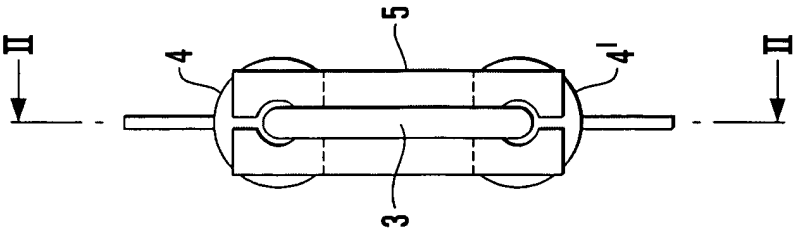

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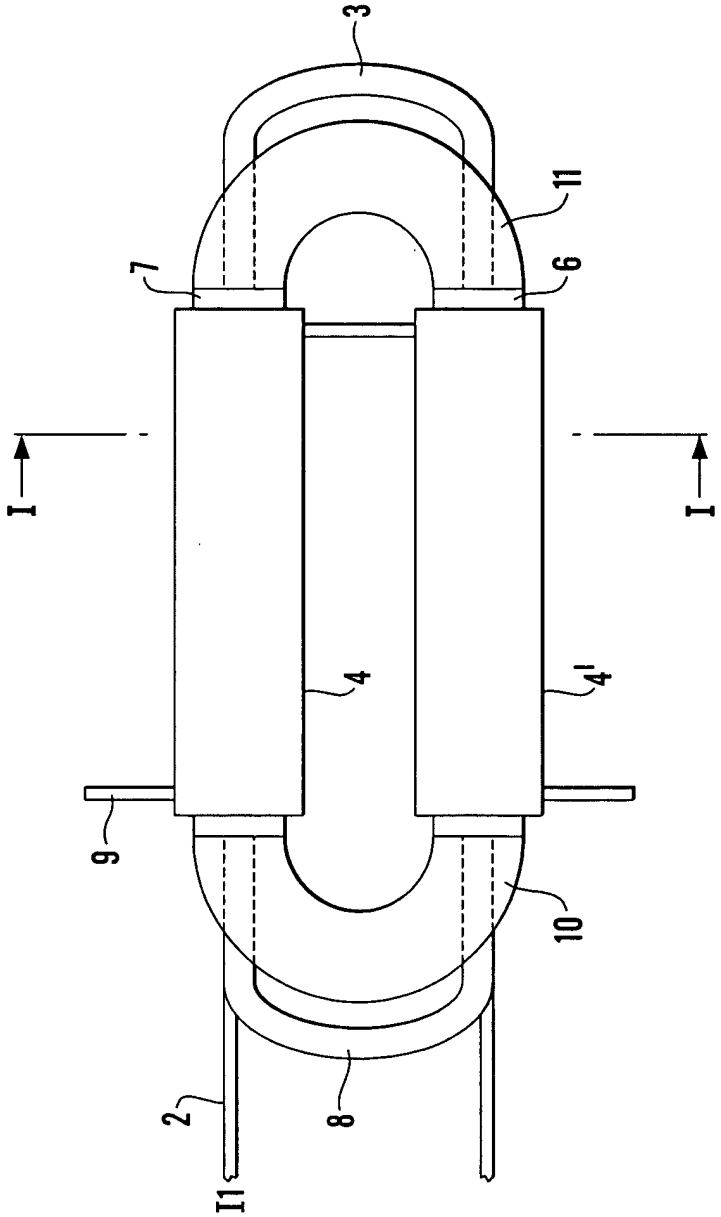

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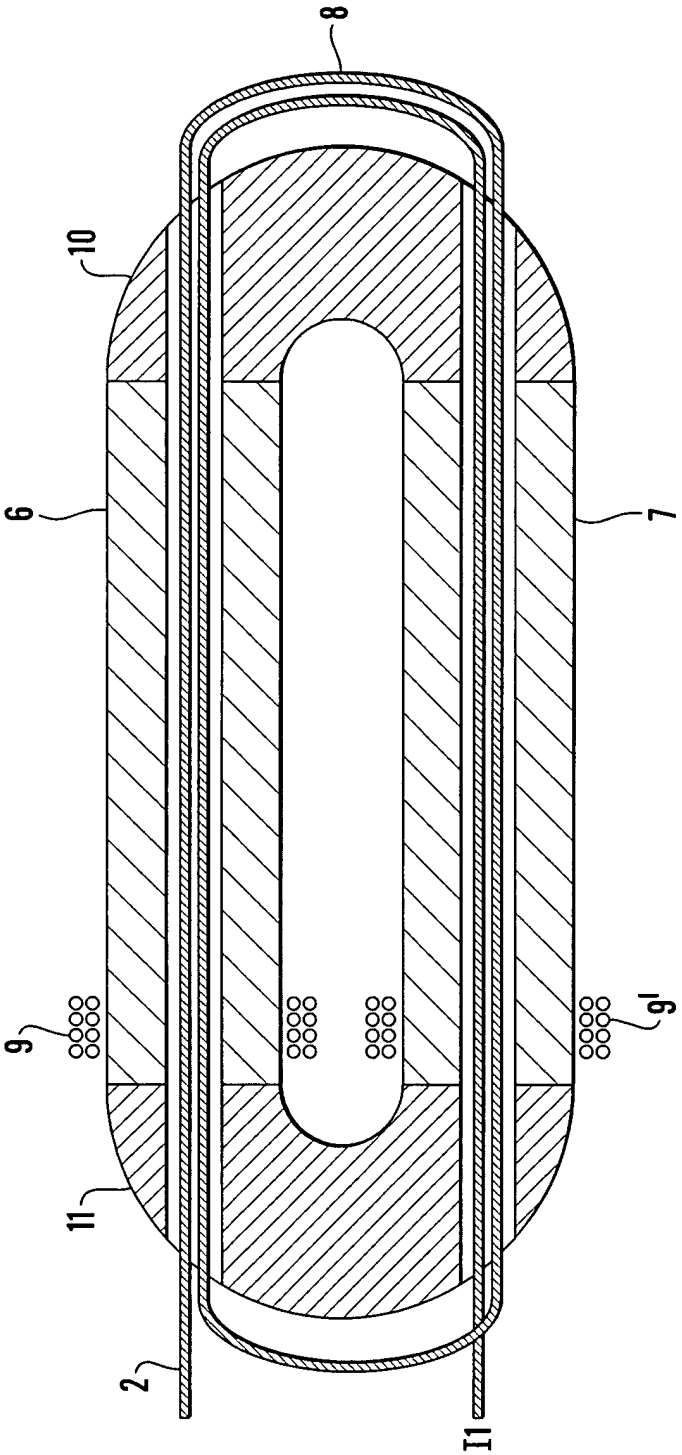
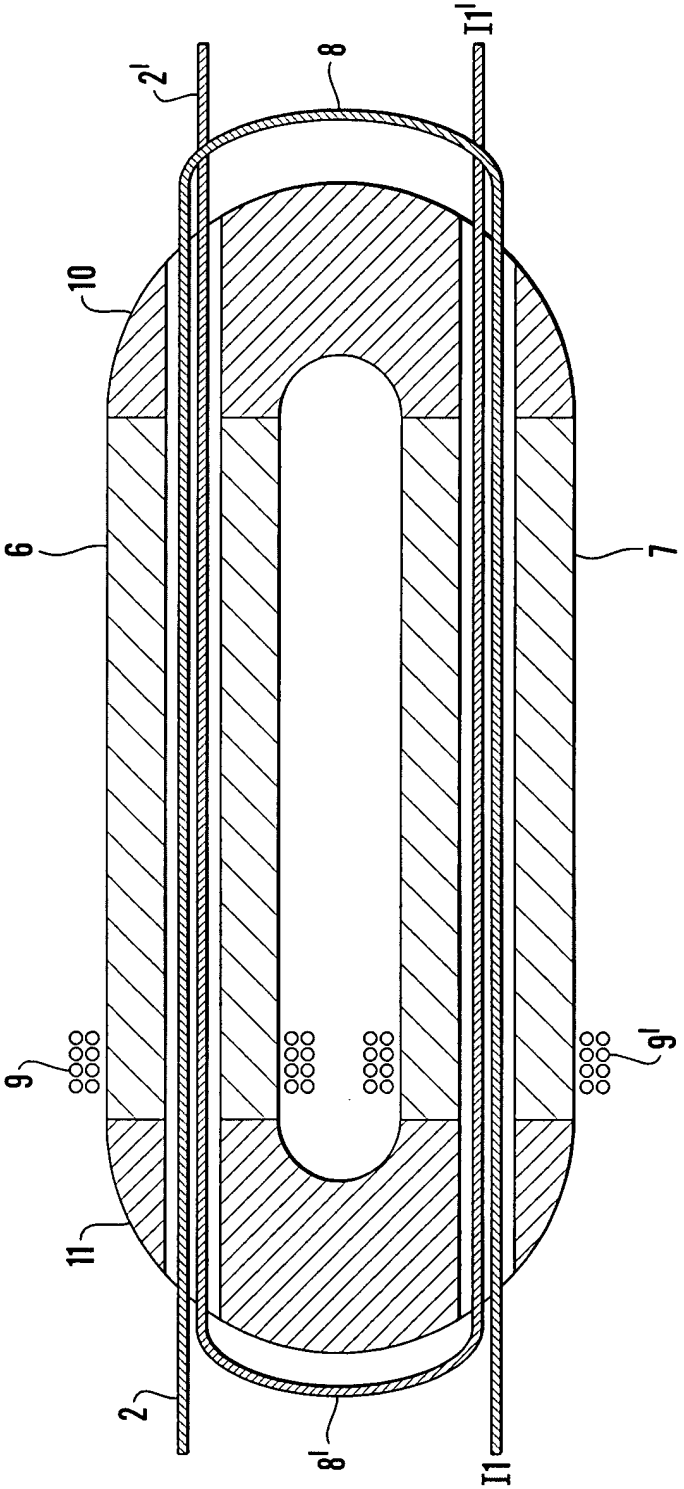


Fig. 13



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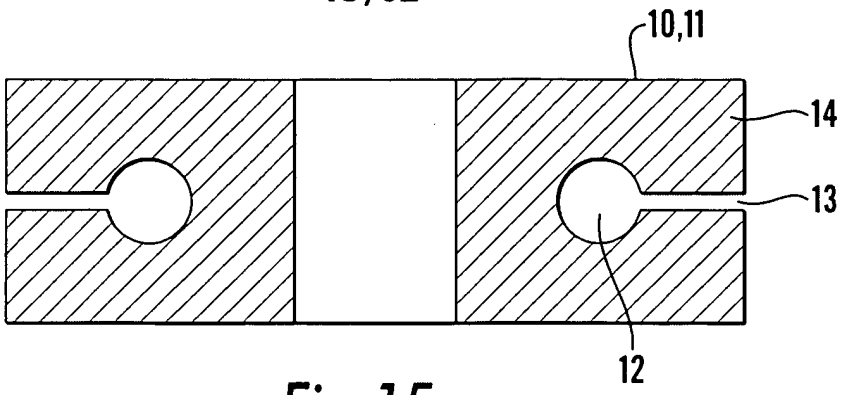

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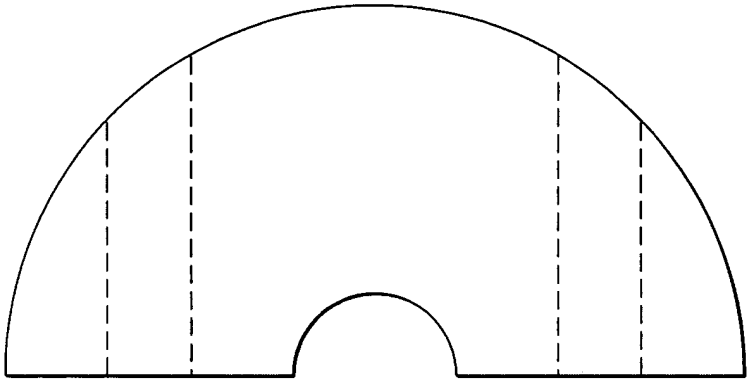
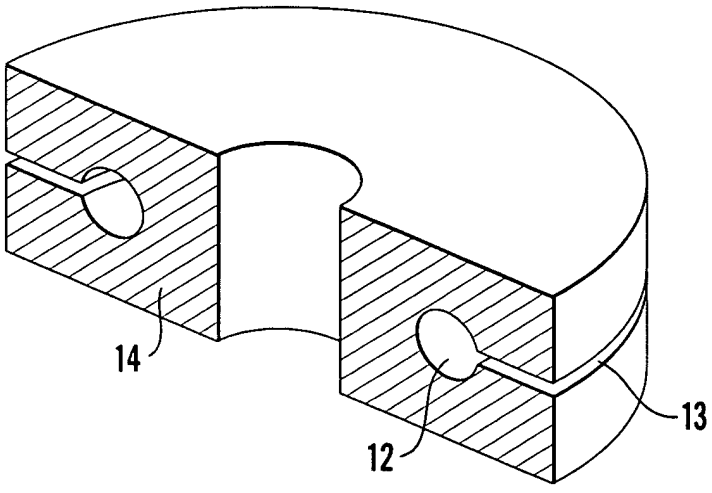


Fig. 15b



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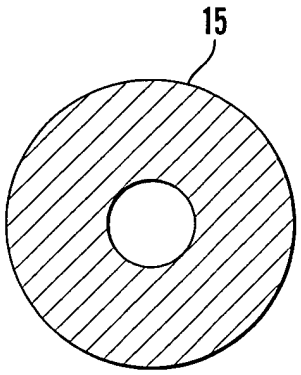

Fig. 16

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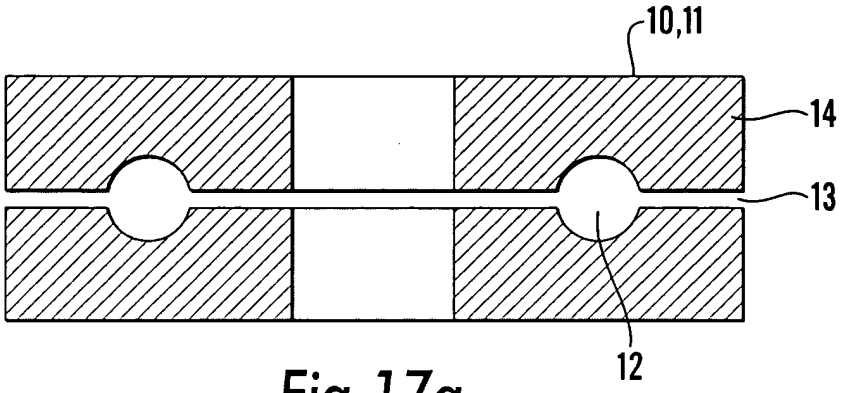

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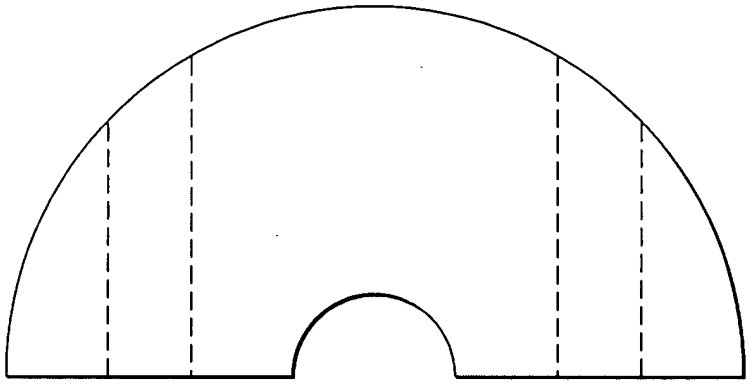

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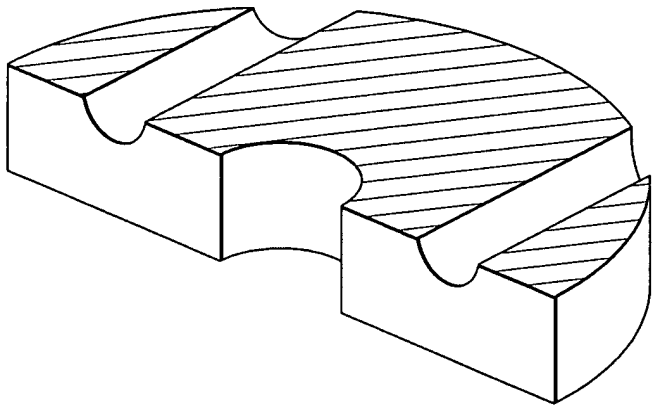

Fig. 17c

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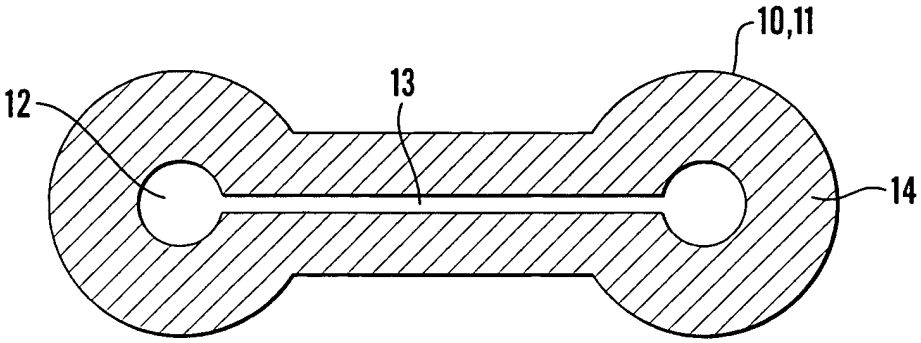

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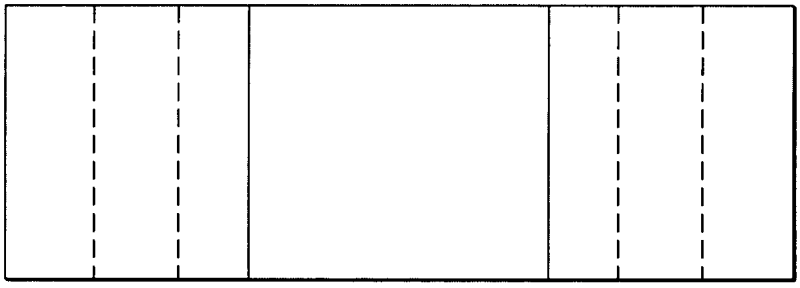

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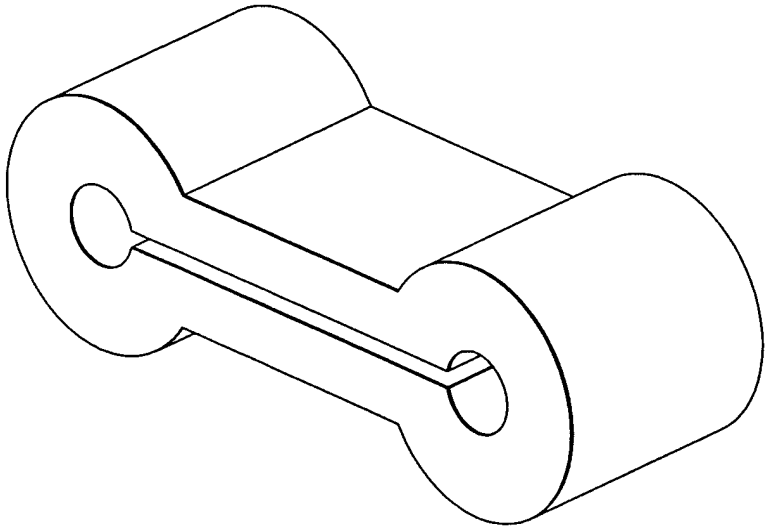


Fig. 18c

Fig.19

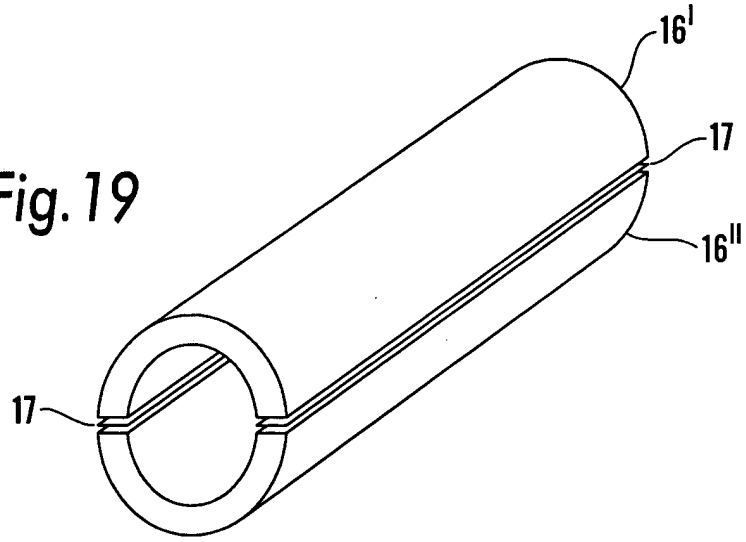
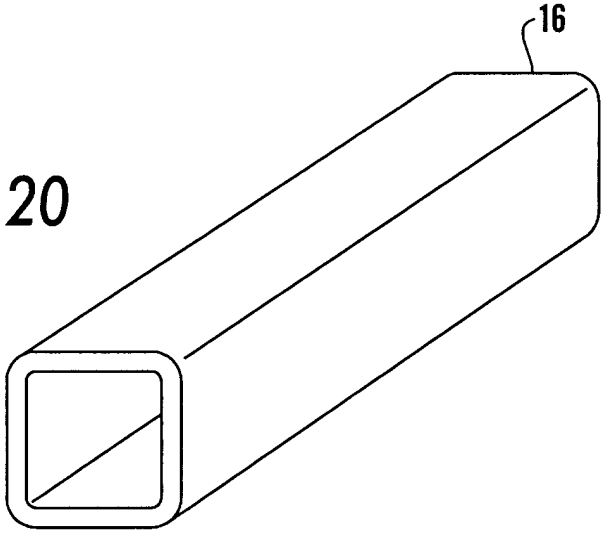


Fig.20



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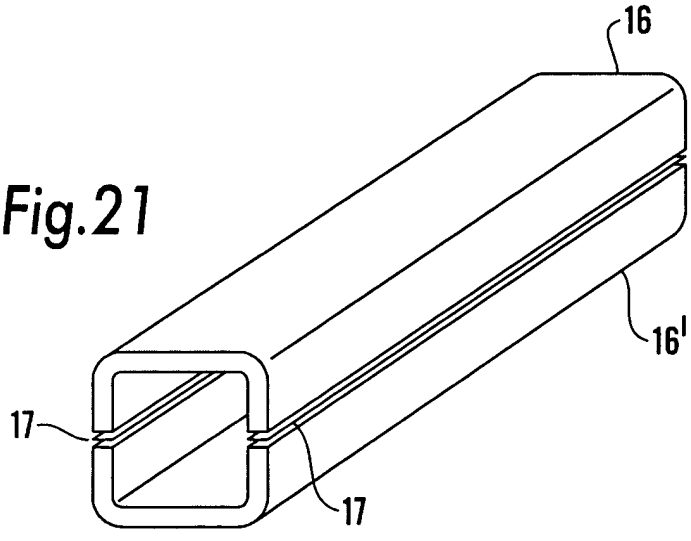

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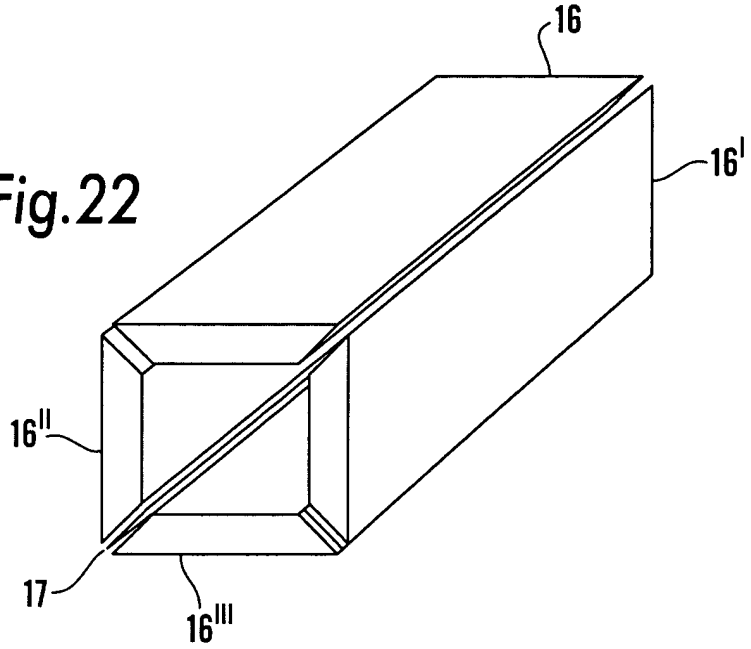

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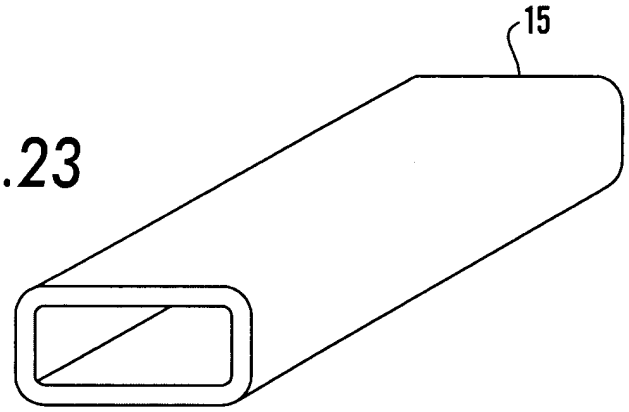

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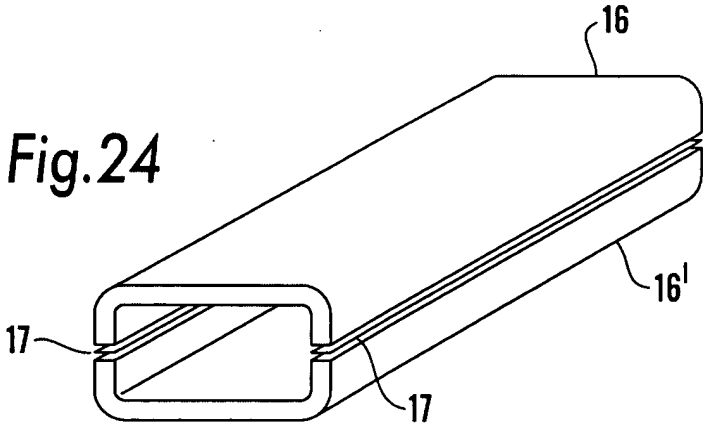

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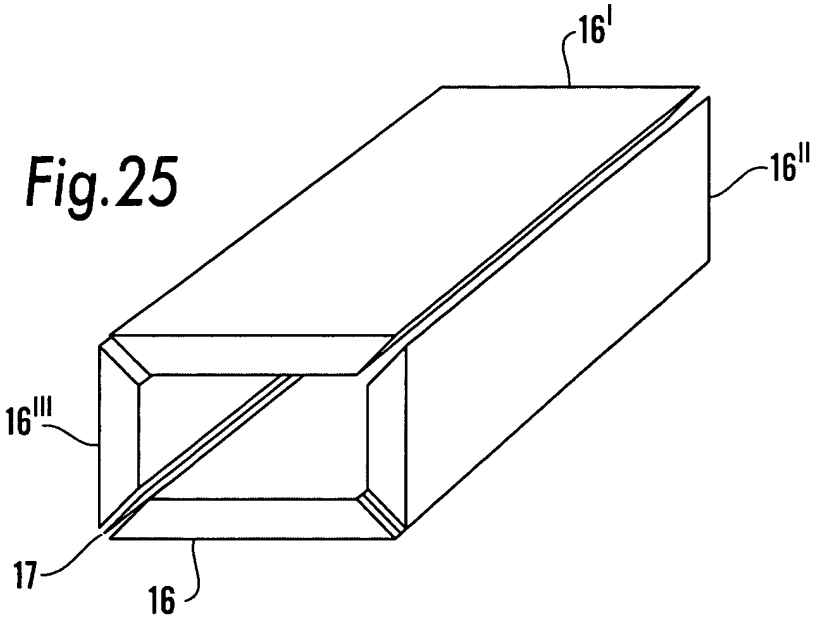
Fig.25



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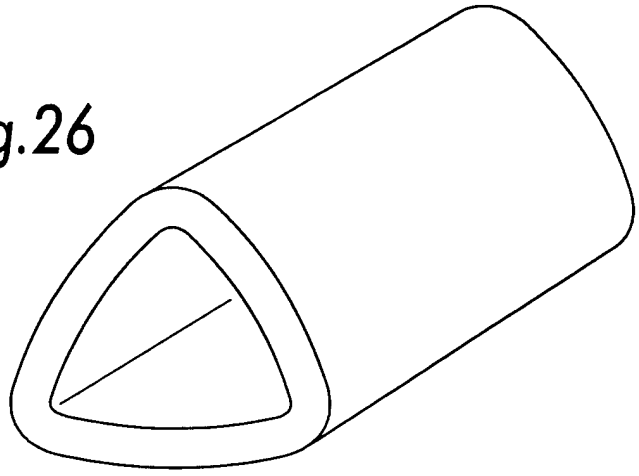

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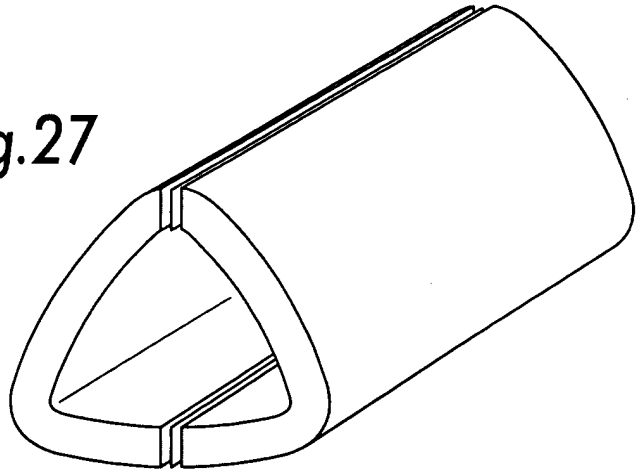

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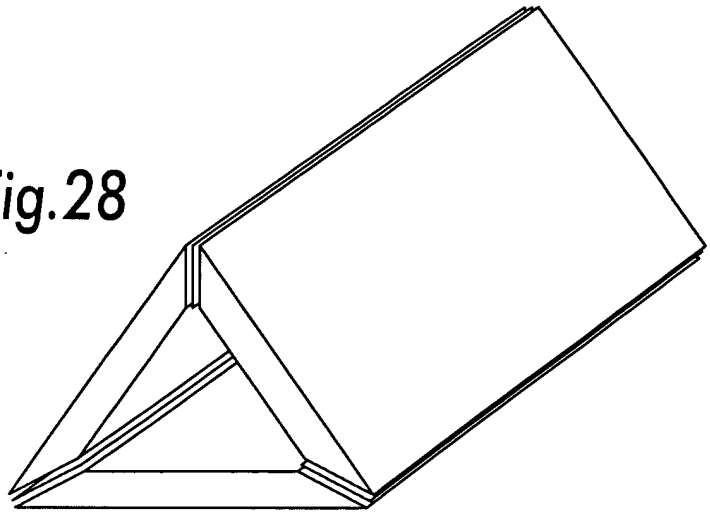
Fig.28



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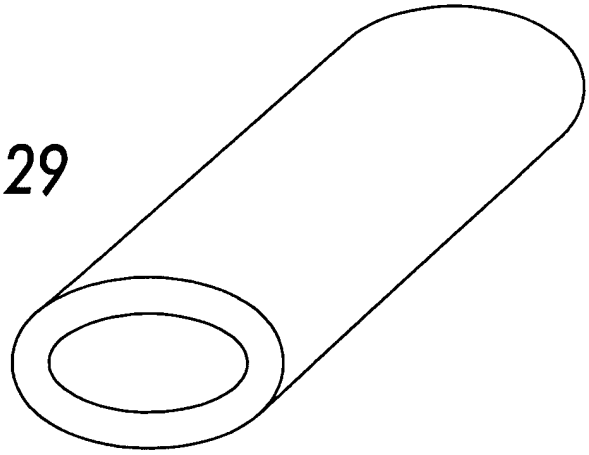

Fig.30

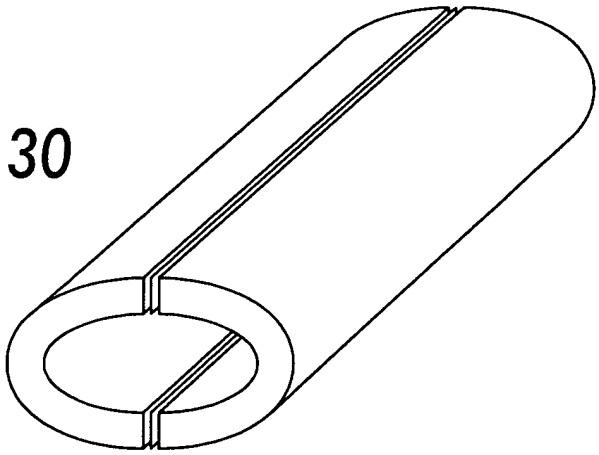

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Fig.31

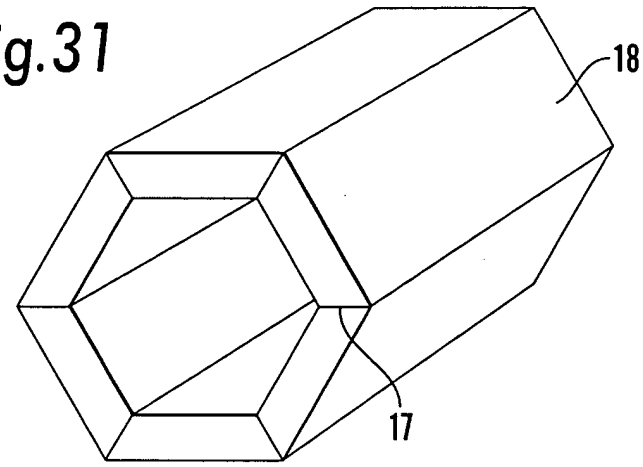
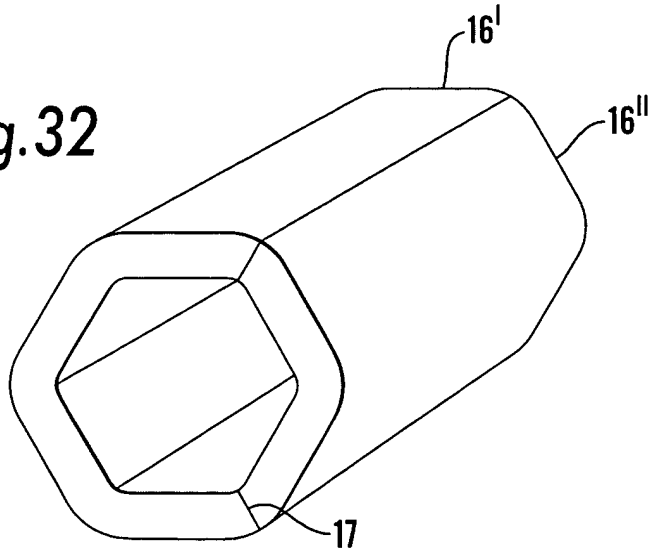


Fig.32



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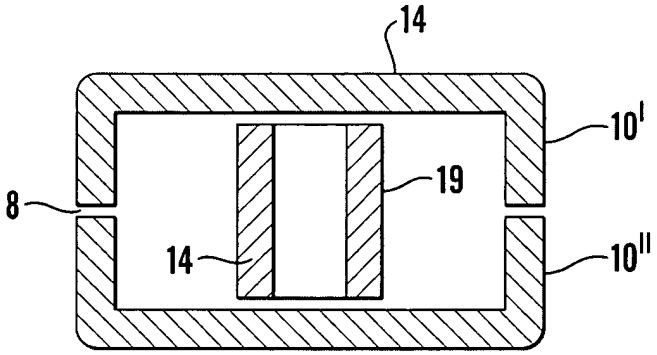

Fig.33a

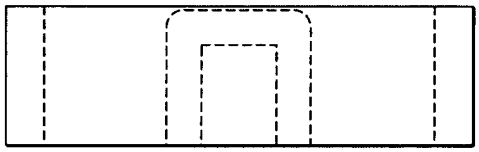

Fig.33b

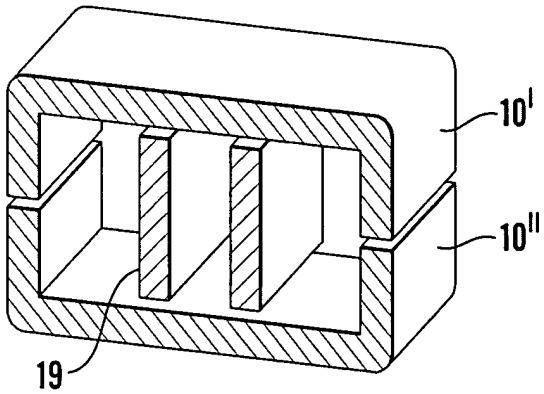

Fig.33c

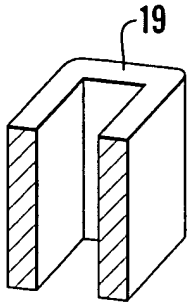

Fig.33d

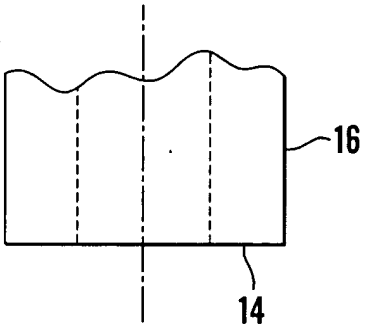

Fig.34

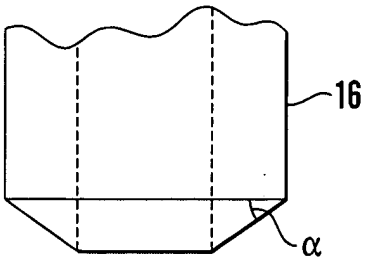

Fig.35

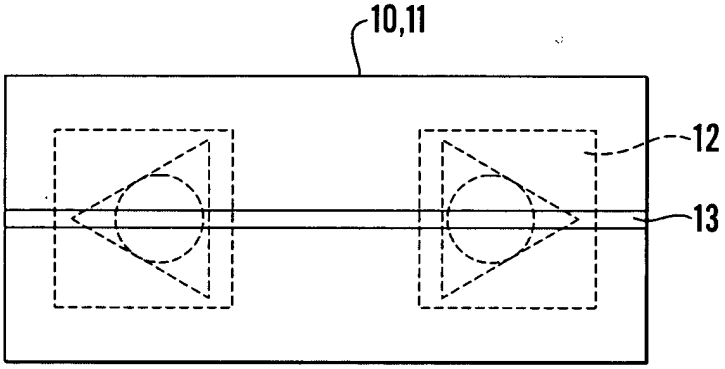

Fig.36

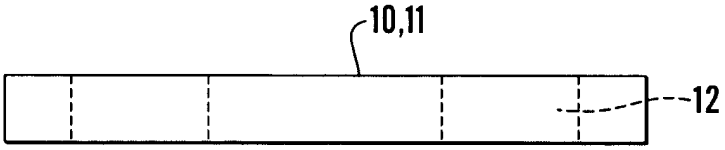

Fig.37

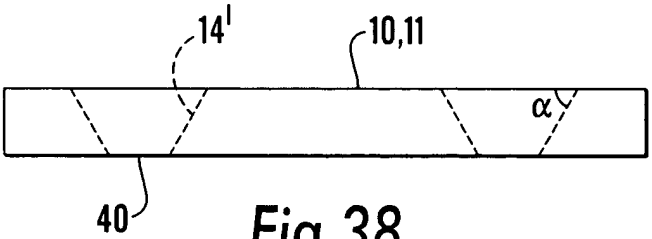

Fig.38

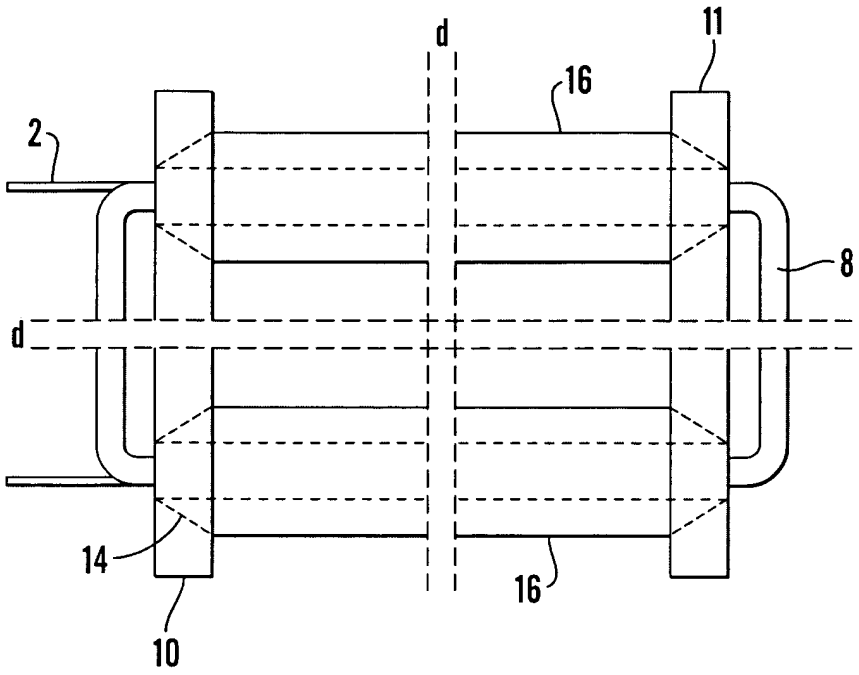

Fig.39a

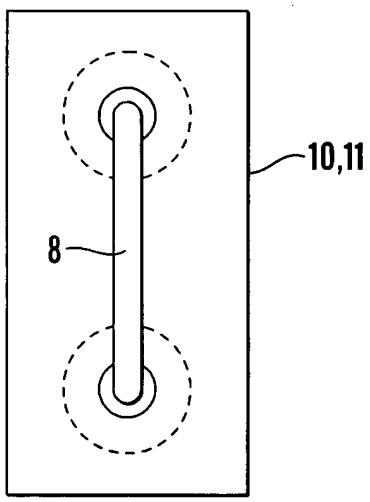

Fig.39b

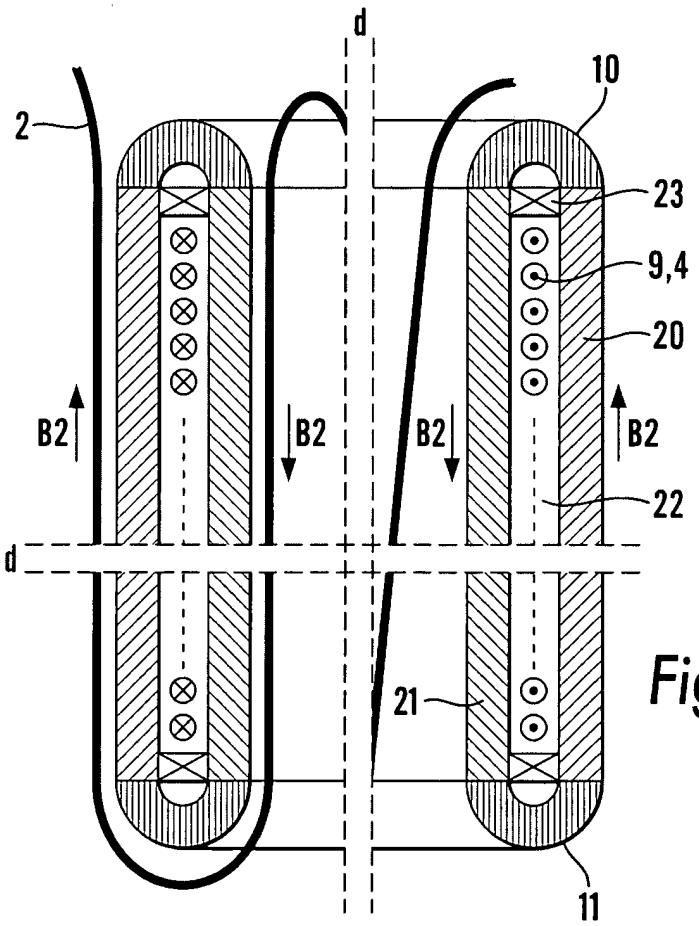

Fig.40a

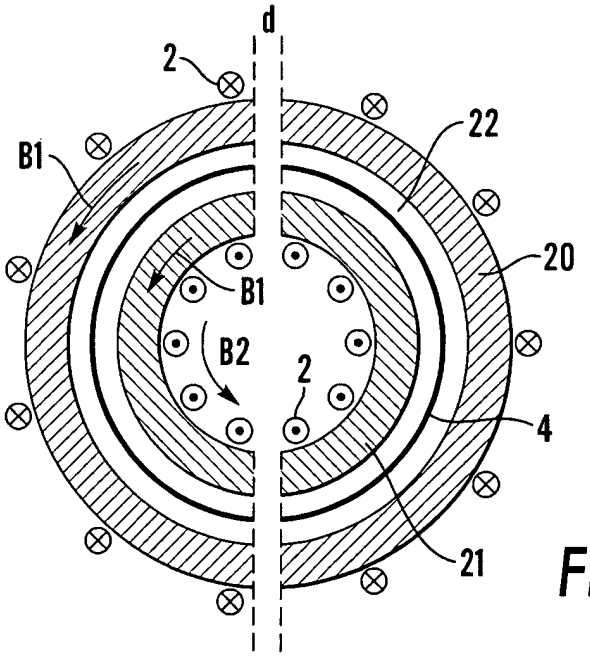

Fig.40b

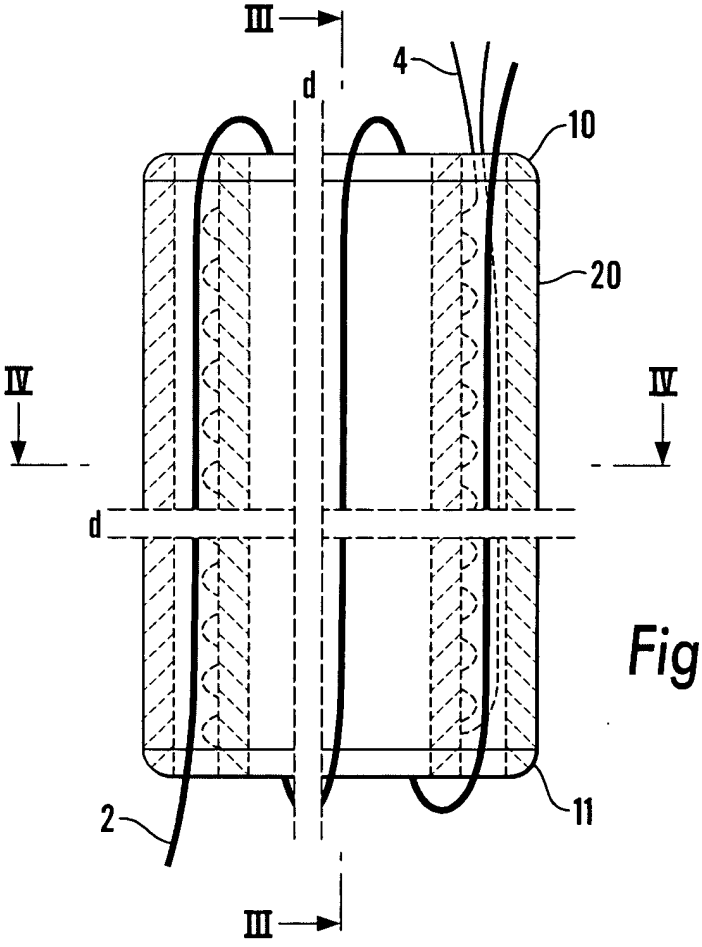

Fig.41a

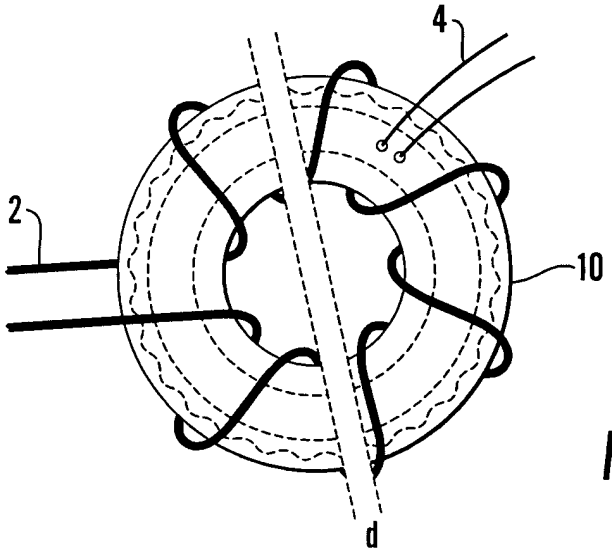

Fig.41b

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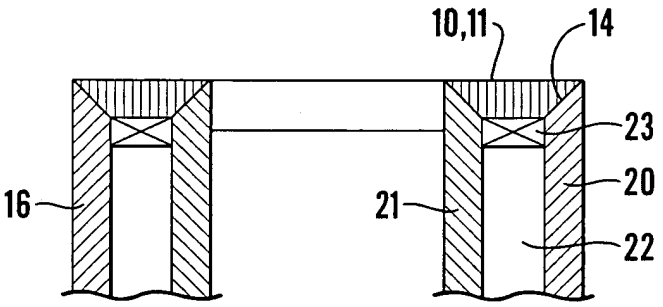

Fig.42a

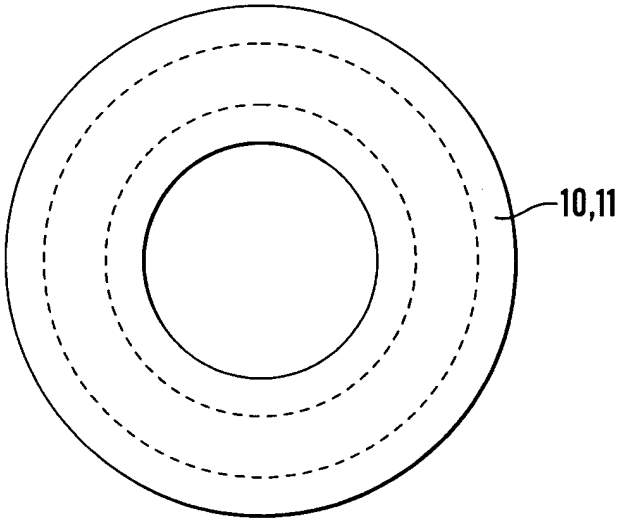

Fig.42b

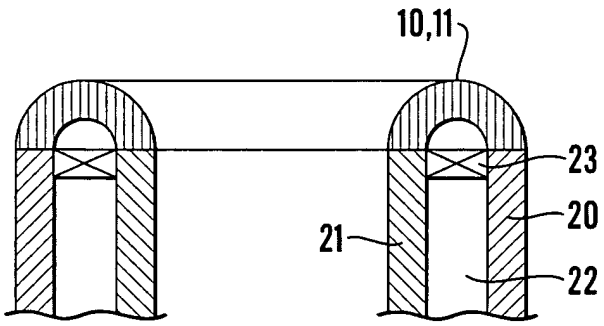

Fig.43

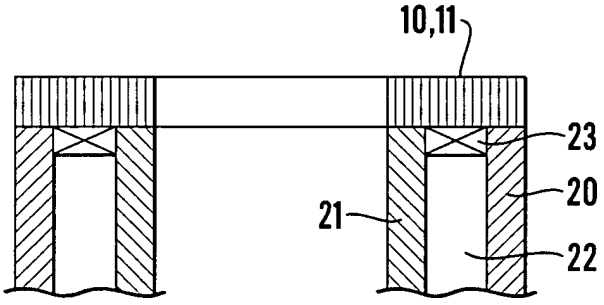

Fig.44

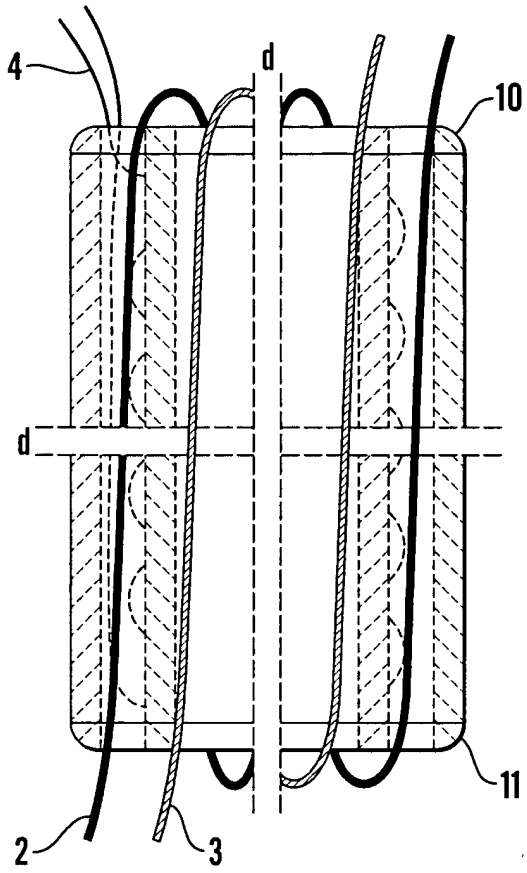

Fig.45a

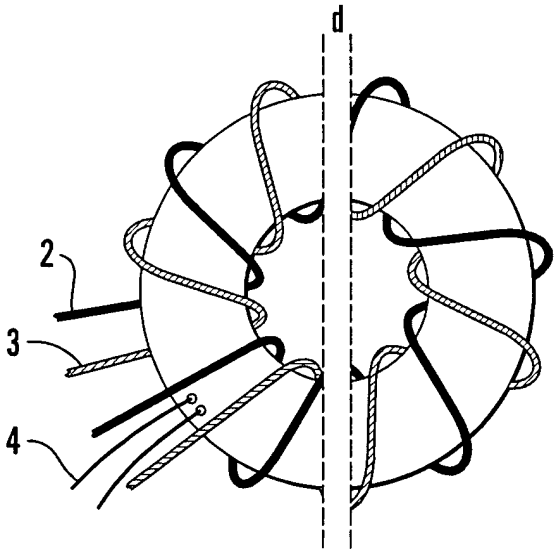

Fig.45b

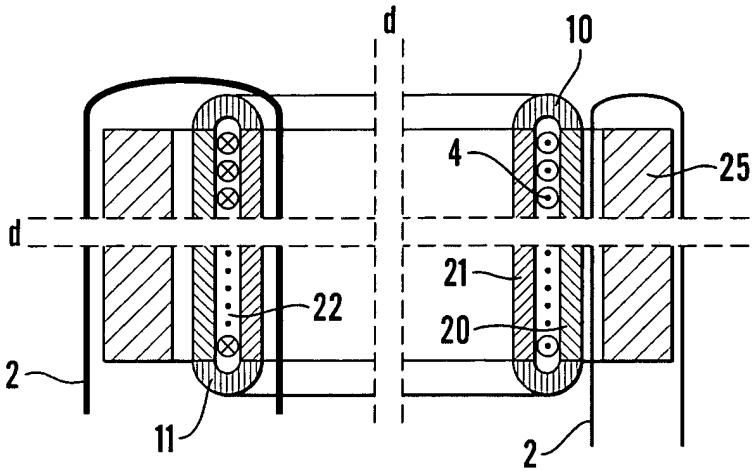

Fig.46a

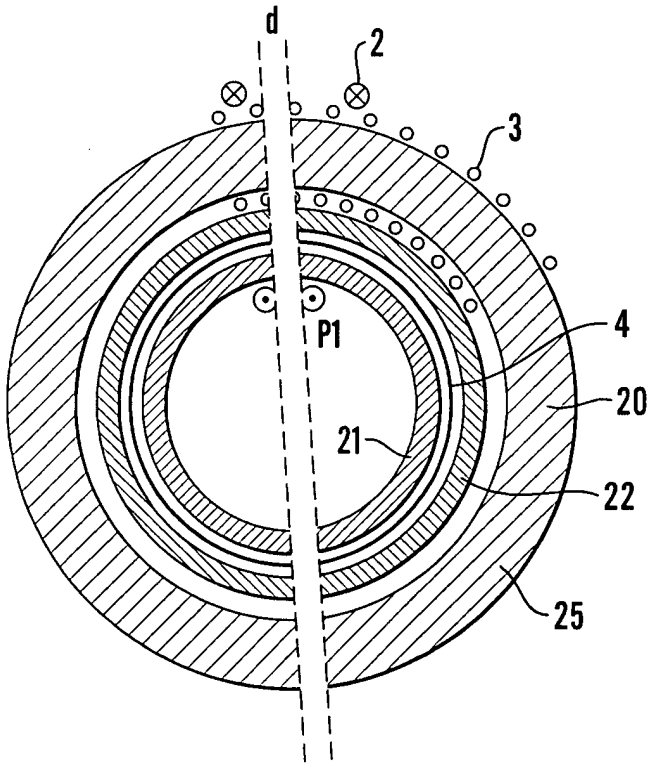

Fig.46b

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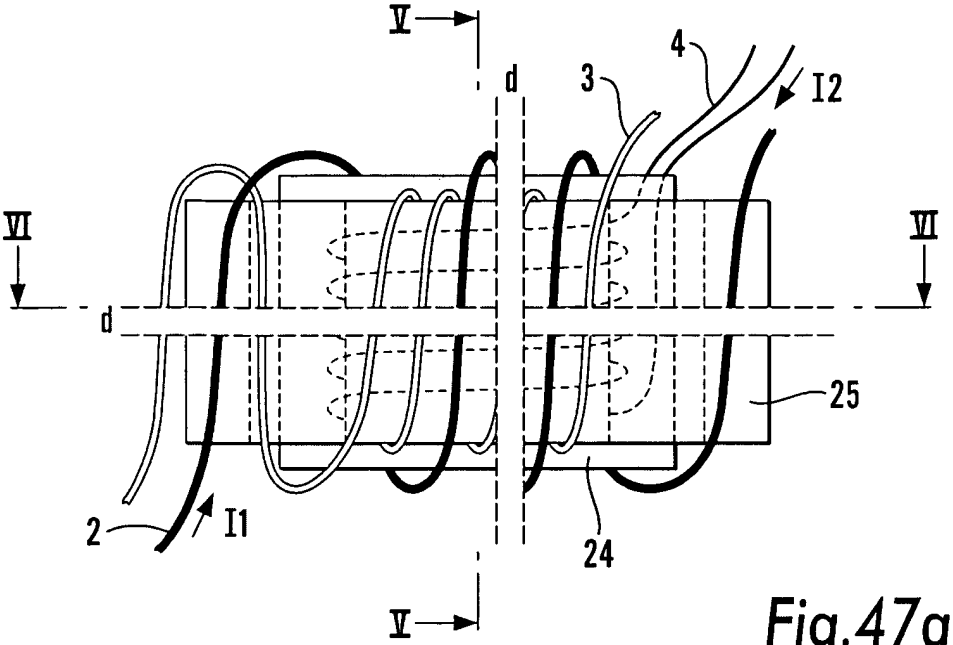

Fig.47a

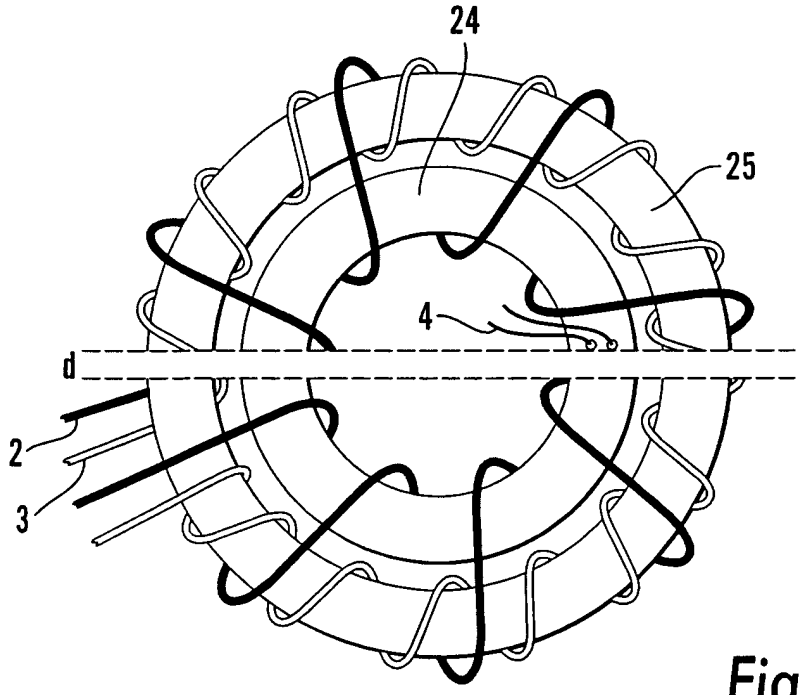

Fig.47b

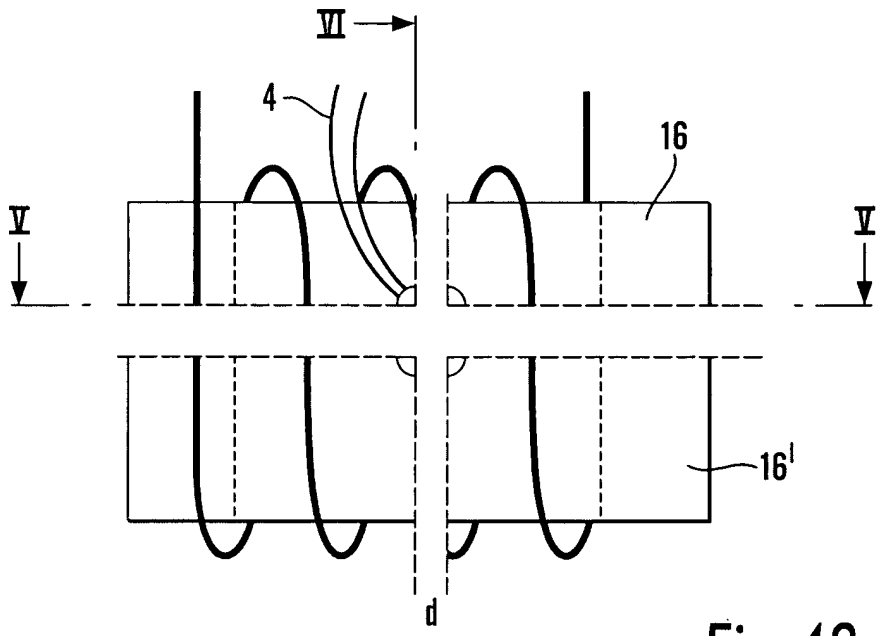

Fig.48

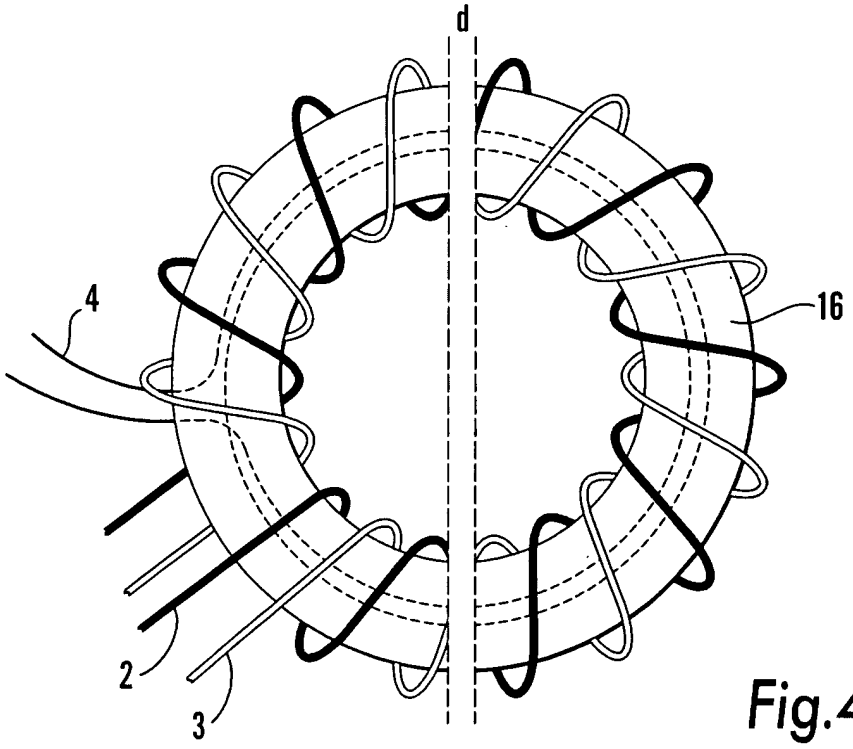

Fig.49

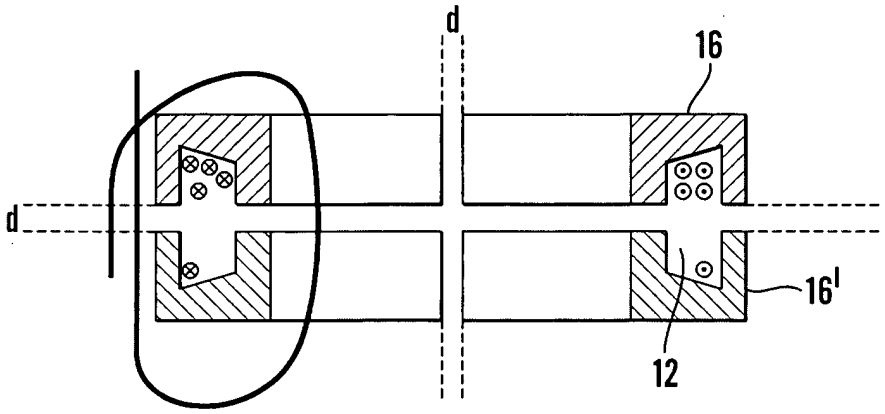

Fig.50

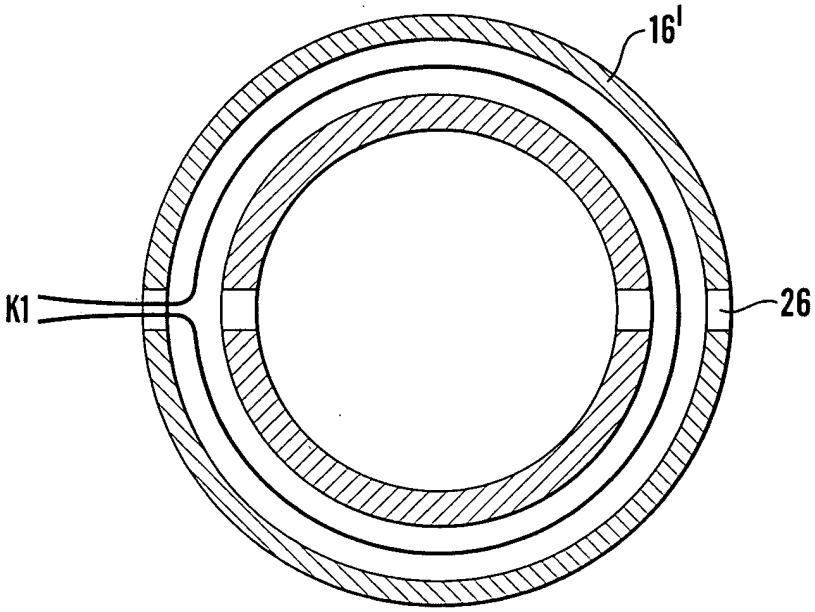

Fig.51a

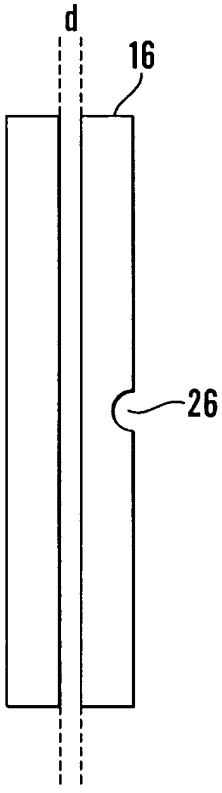

Fig.51b

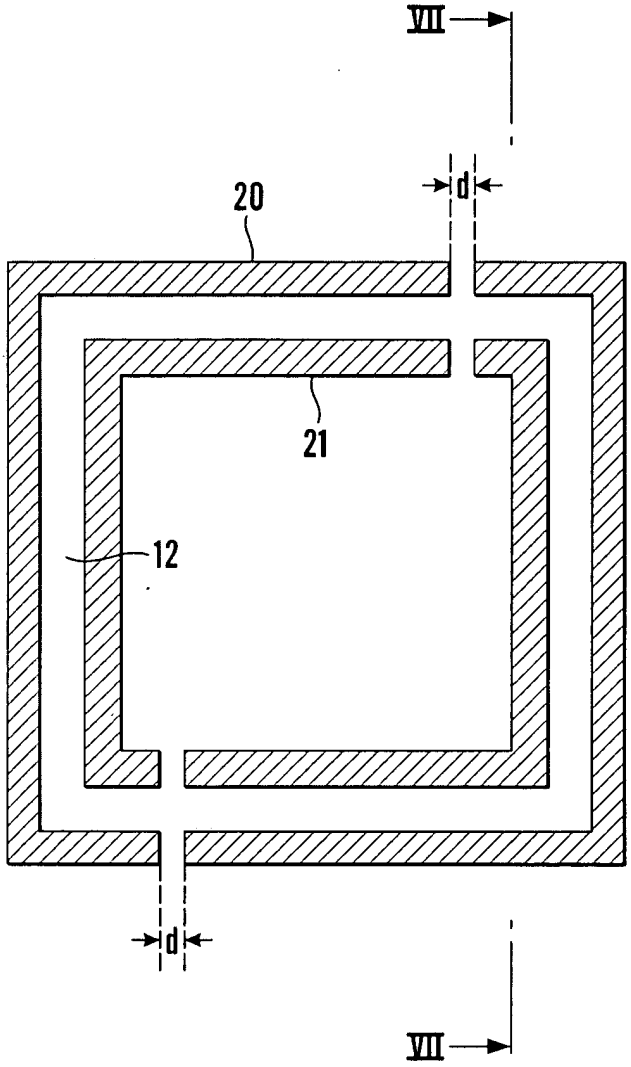

Fig.52a

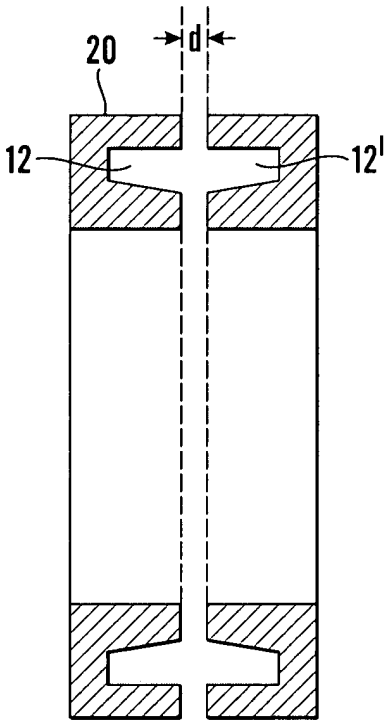

Fig.52b

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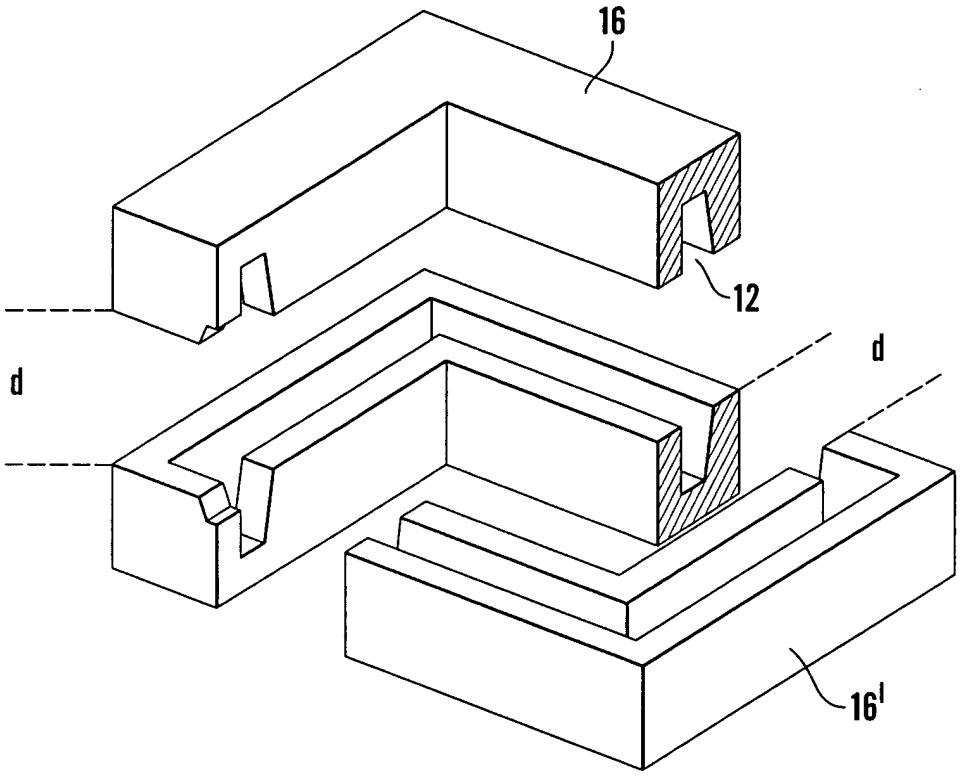

Fig.53a

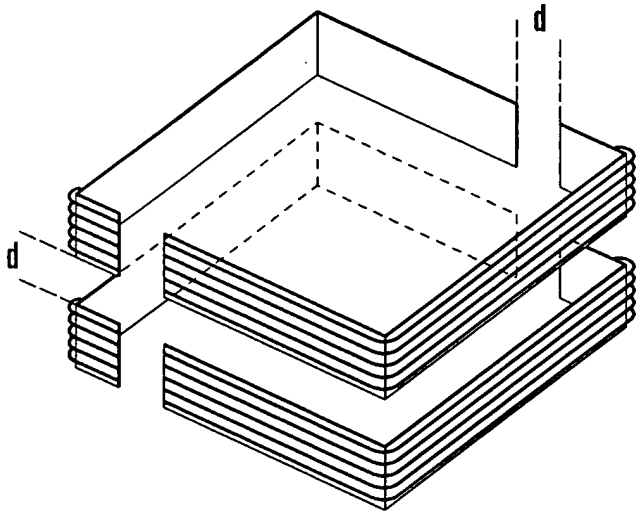

Fig.53b

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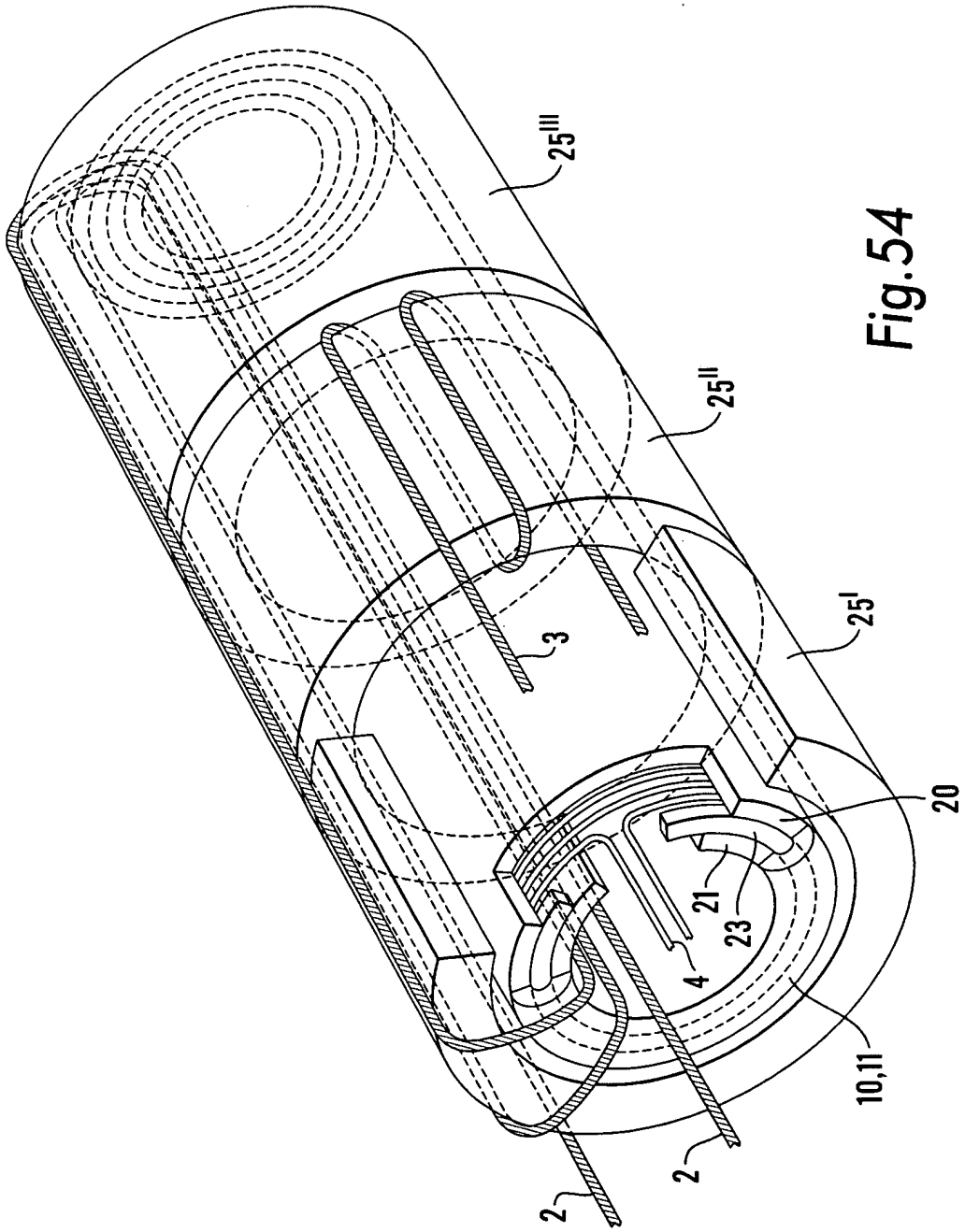


Fig.54

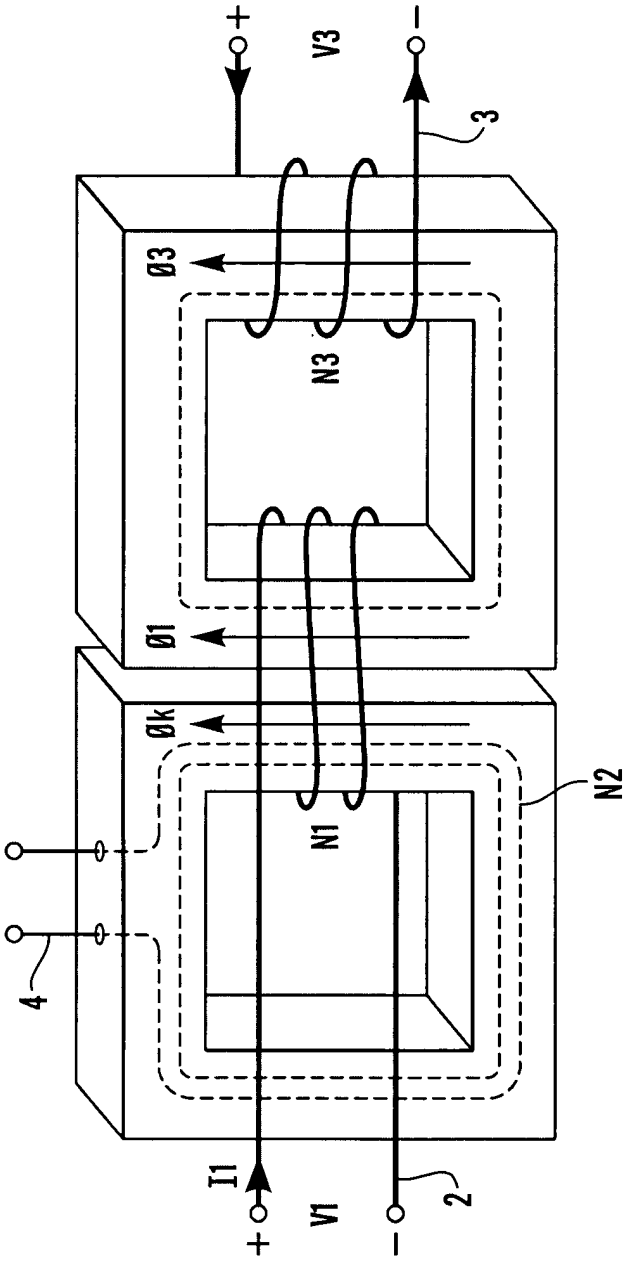


Fig.55

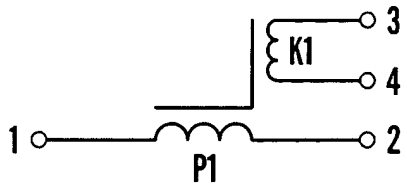


Fig.56

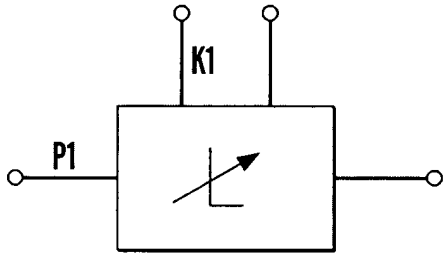
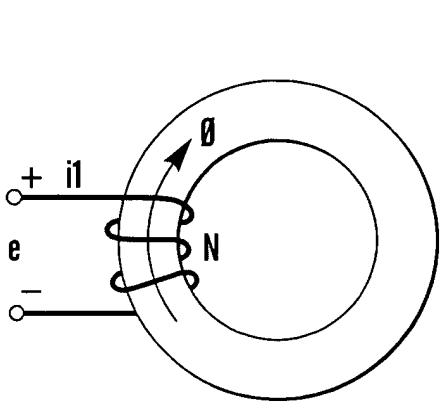


Fig.57



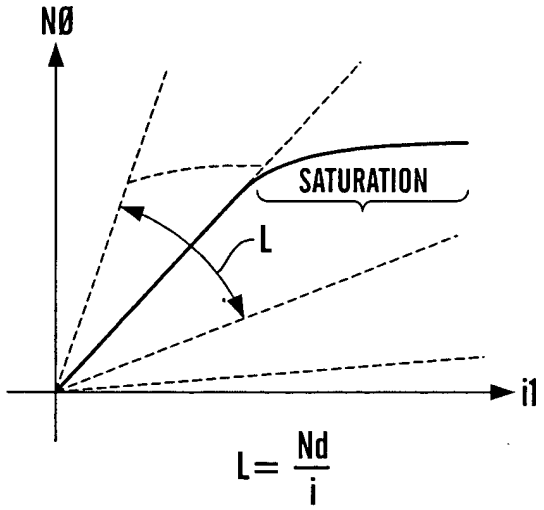


Fig.58

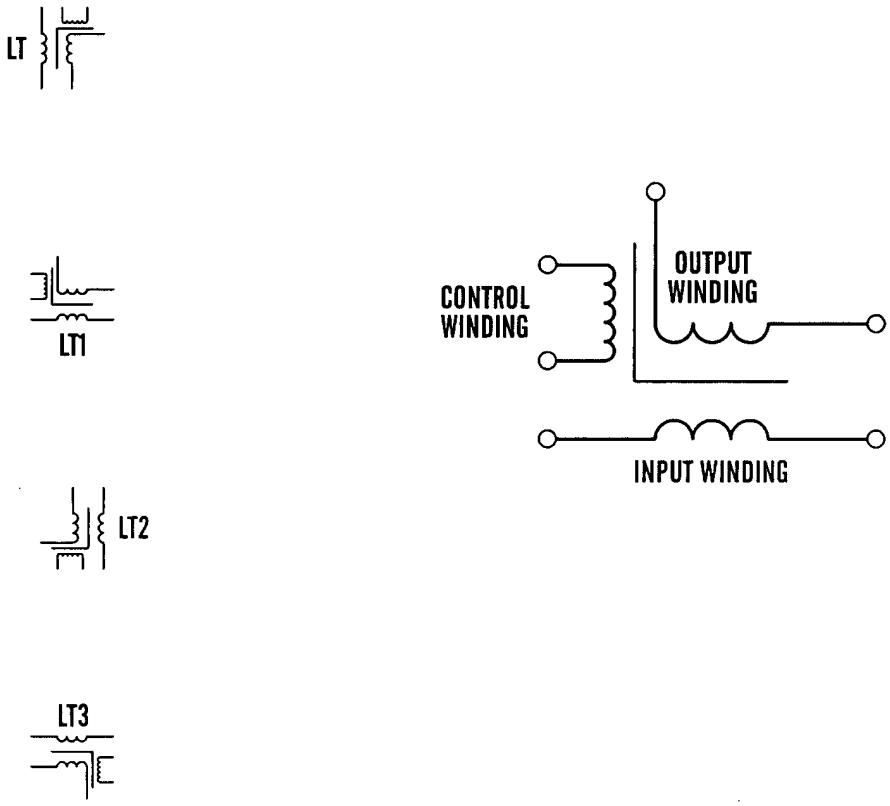

LT
LT1
LT2
LT3
CONTROL WINDING
OUTPUT WINDING
INPUT WINDING

Fig.59

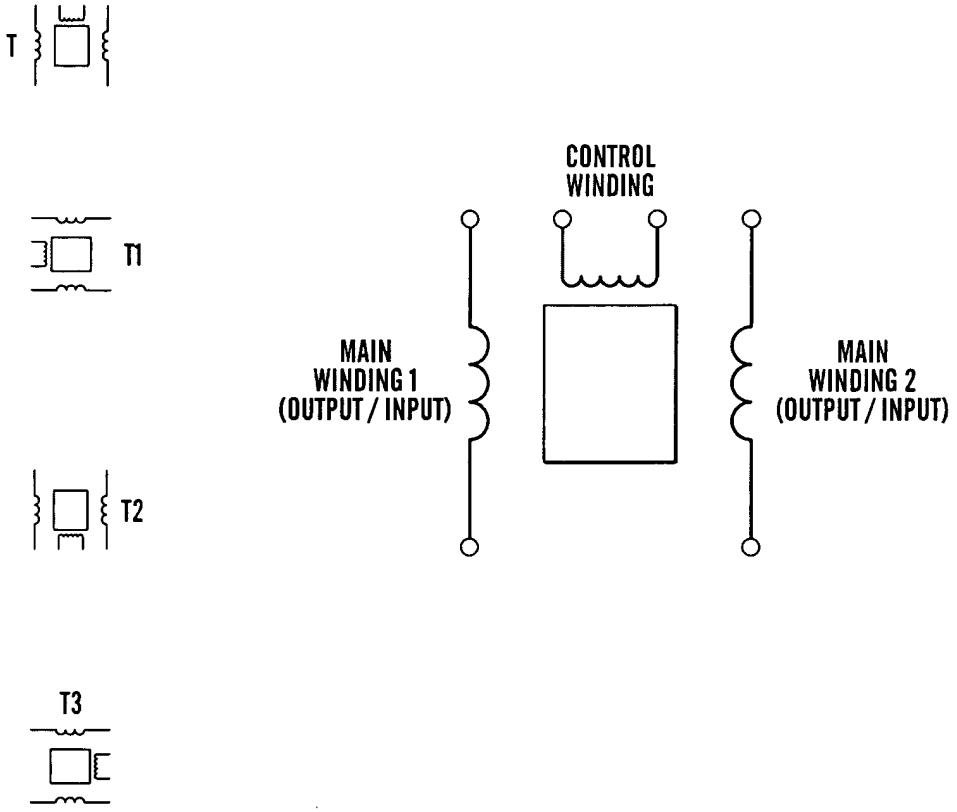

T
T1
T2
T3
CONTROL WINDING
MAIN WINDING 1 (OUTPUT / INPUT)
MAIN WINDING 2 (OUTPUT / INPUT)

Fig.60

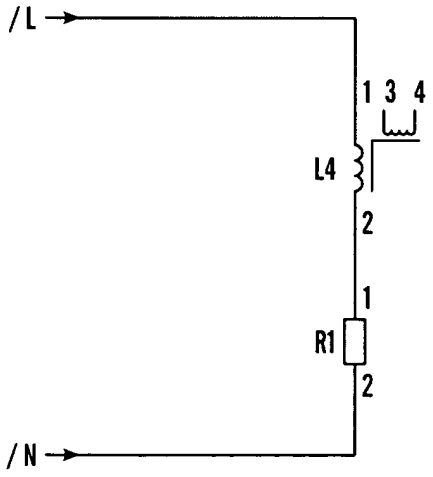

/L
1 3 4
L4
2
1
R1
2
/N

Fig.61

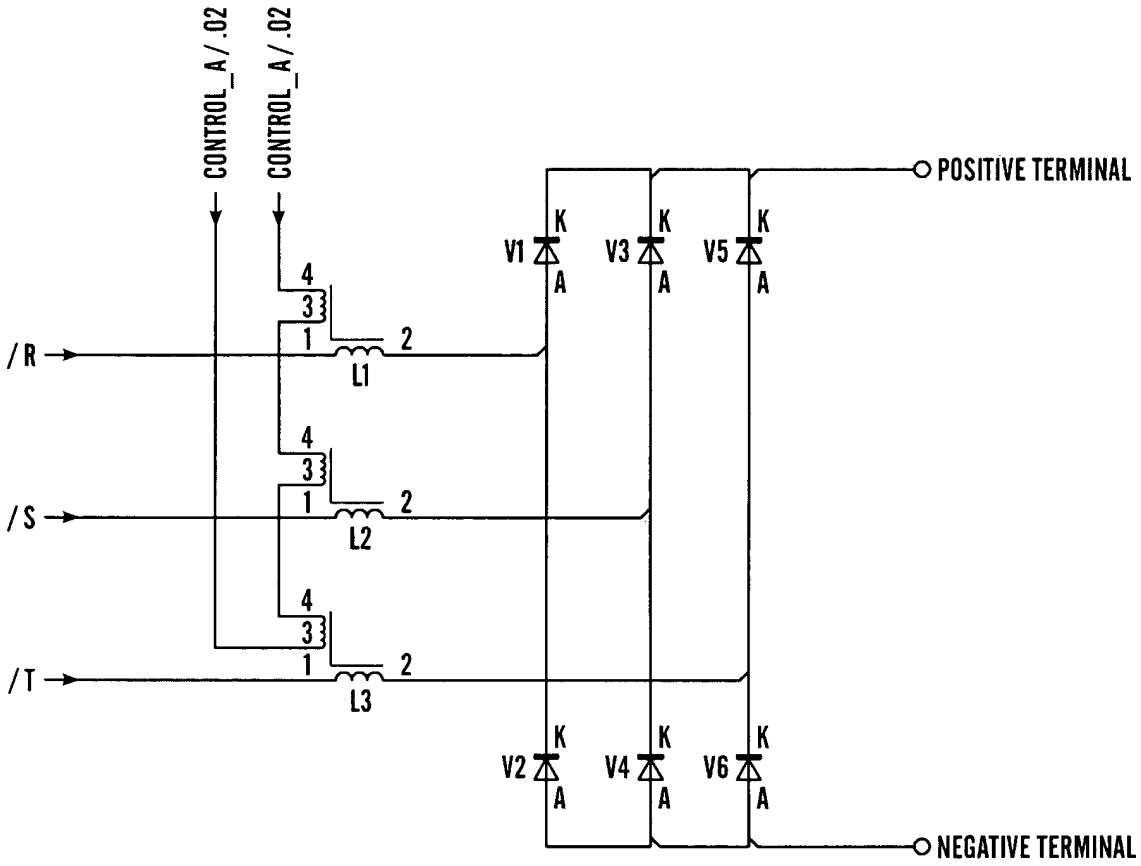

CONTROL_A/.02
CONTROL_A/.02
POSITIVE TERMINAL
NEGATIVE TERMINAL
/R
/S
/T
L1
L2
L3
V1
V2
V3
V4
V5
V6
K
A
1
2
3
4

Fig.62

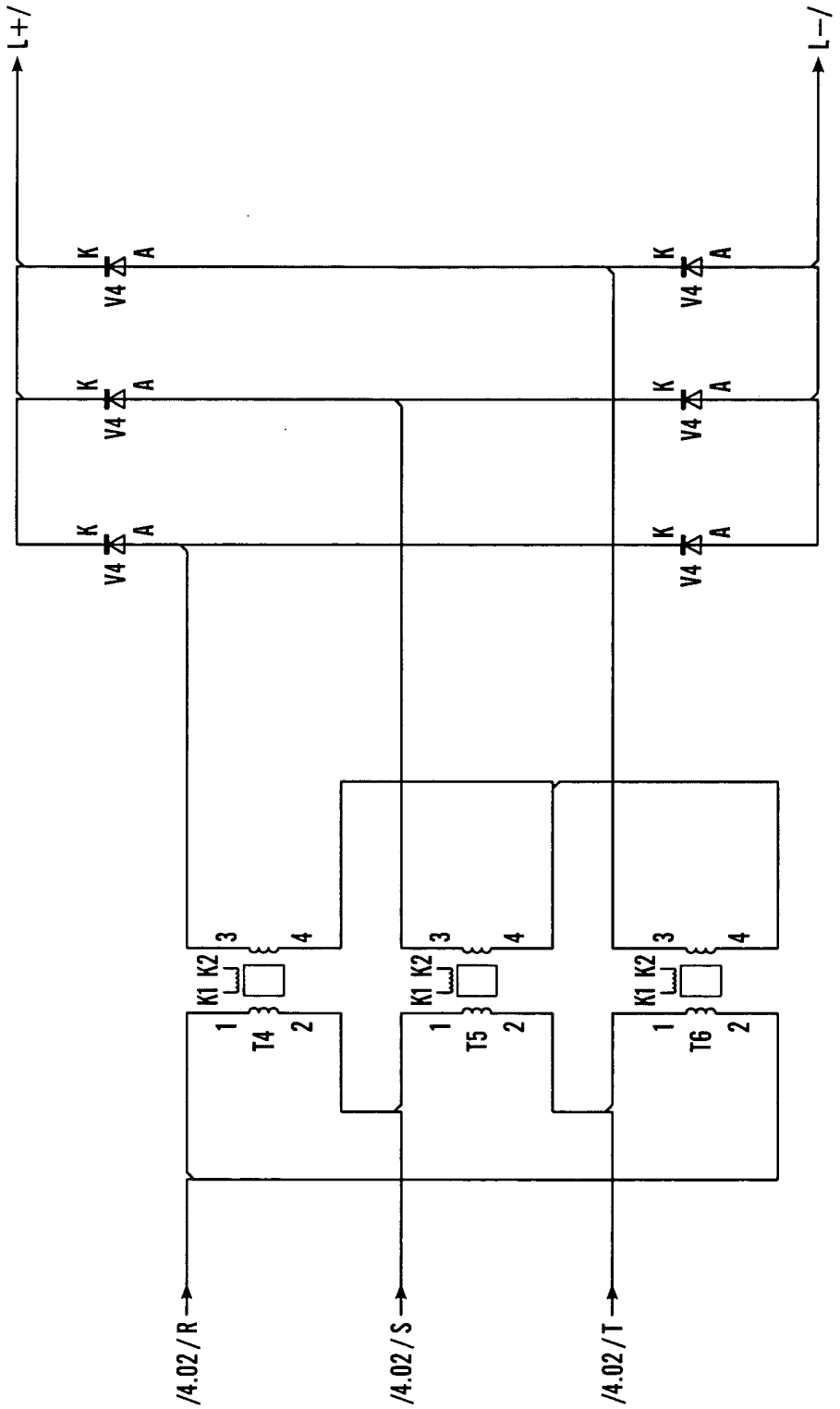


Fig.62a

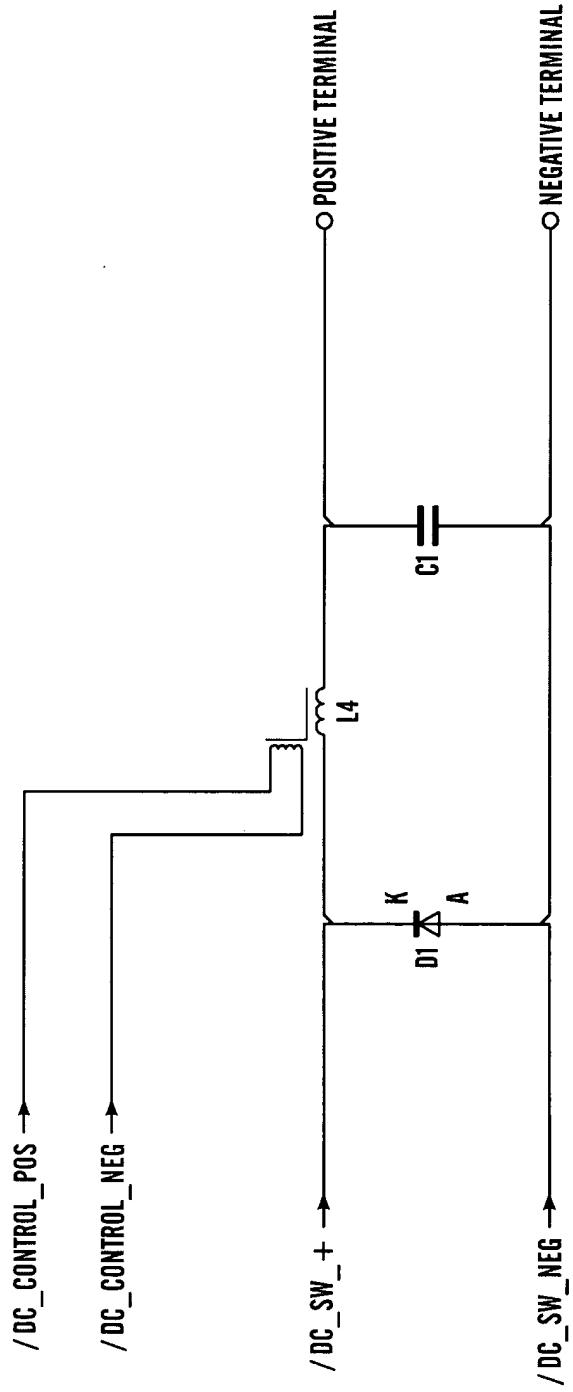

POSITIVE TERMINAL
NEGATIVE TERMINAL
C1
L4
K
A
D1
/DC_CONTROL_POS
/DC_CONTROL_NEG
/DC_SW_+
/DC_SW_NEG

Fig.63

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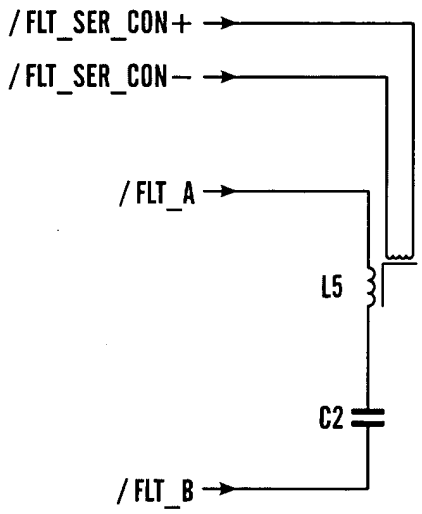

Fig.64a

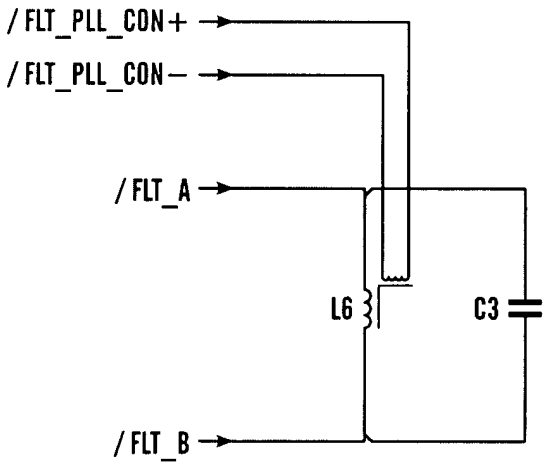

Fig.64b

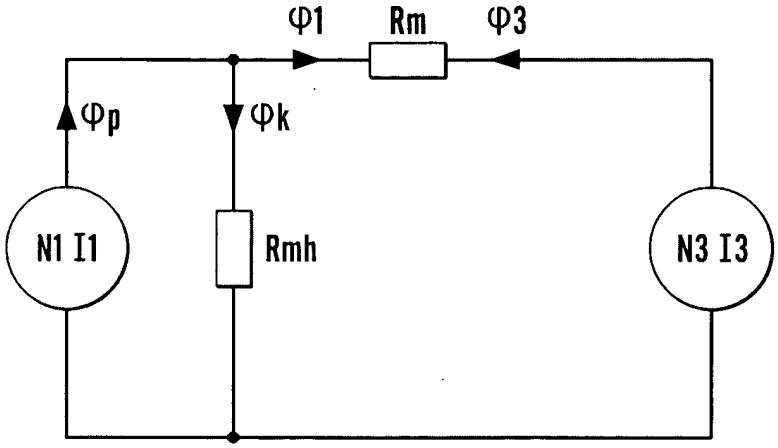

Fig.65a

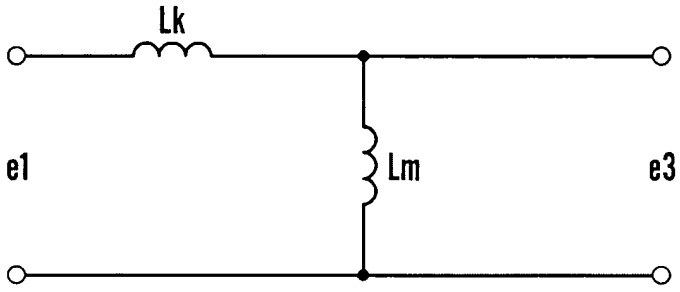

Fig.65b

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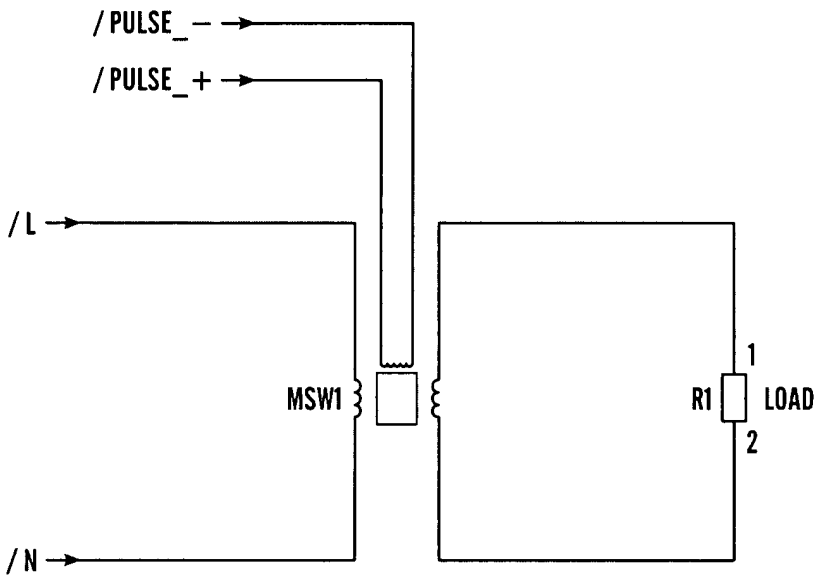

Fig.66

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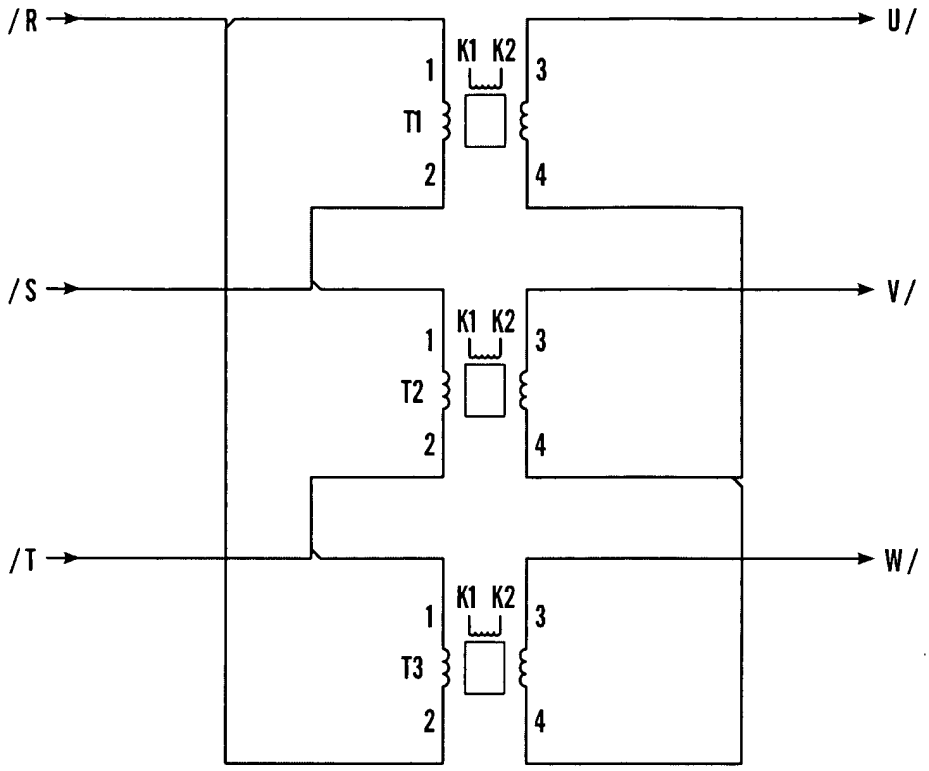

Fig.67

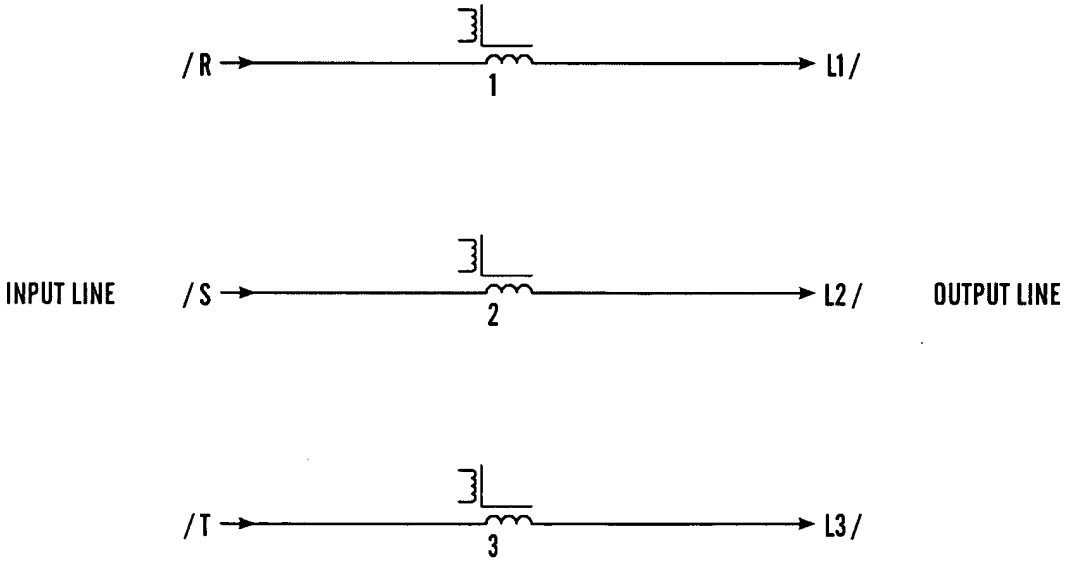

Fig.67a

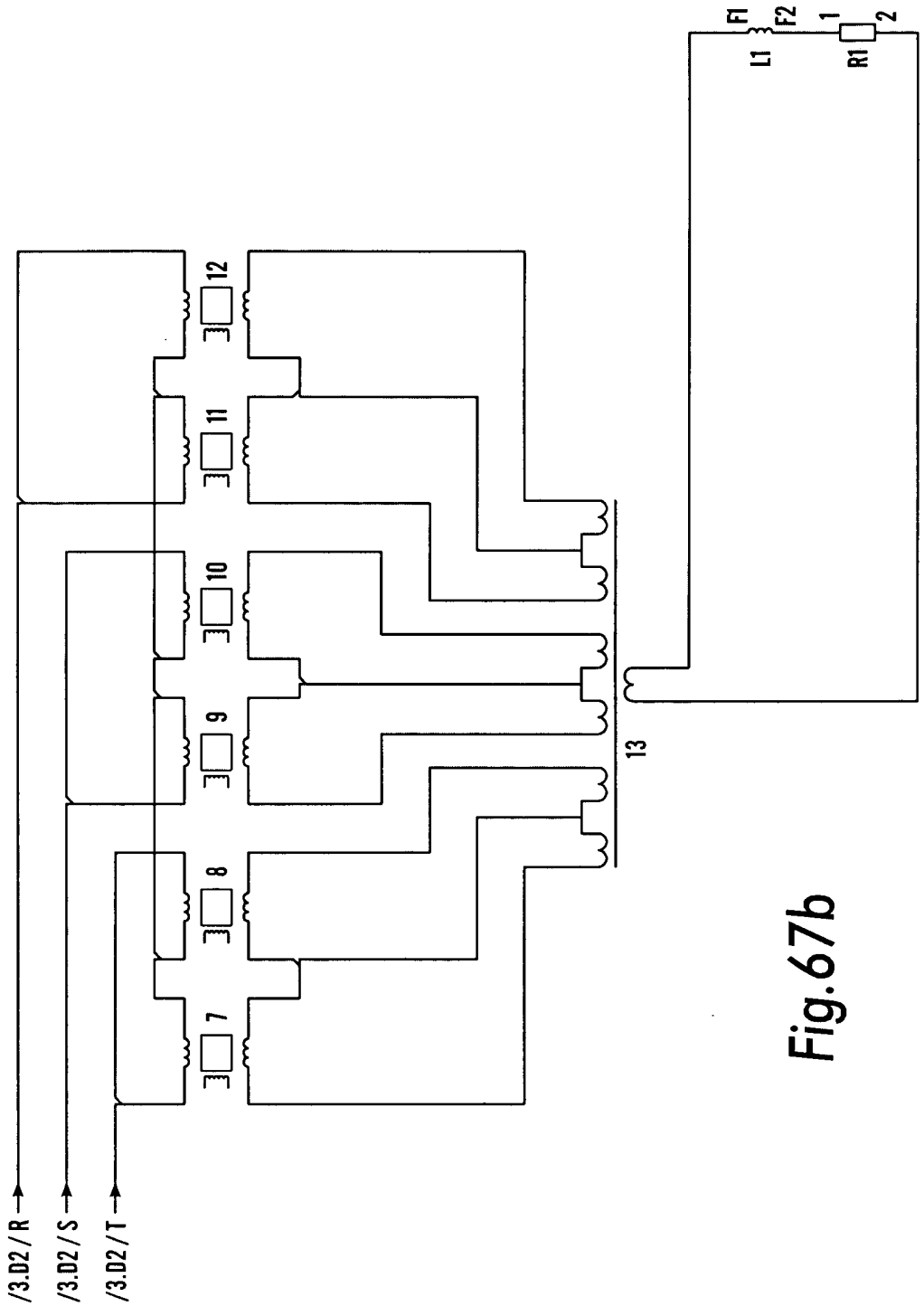

Fig.67b

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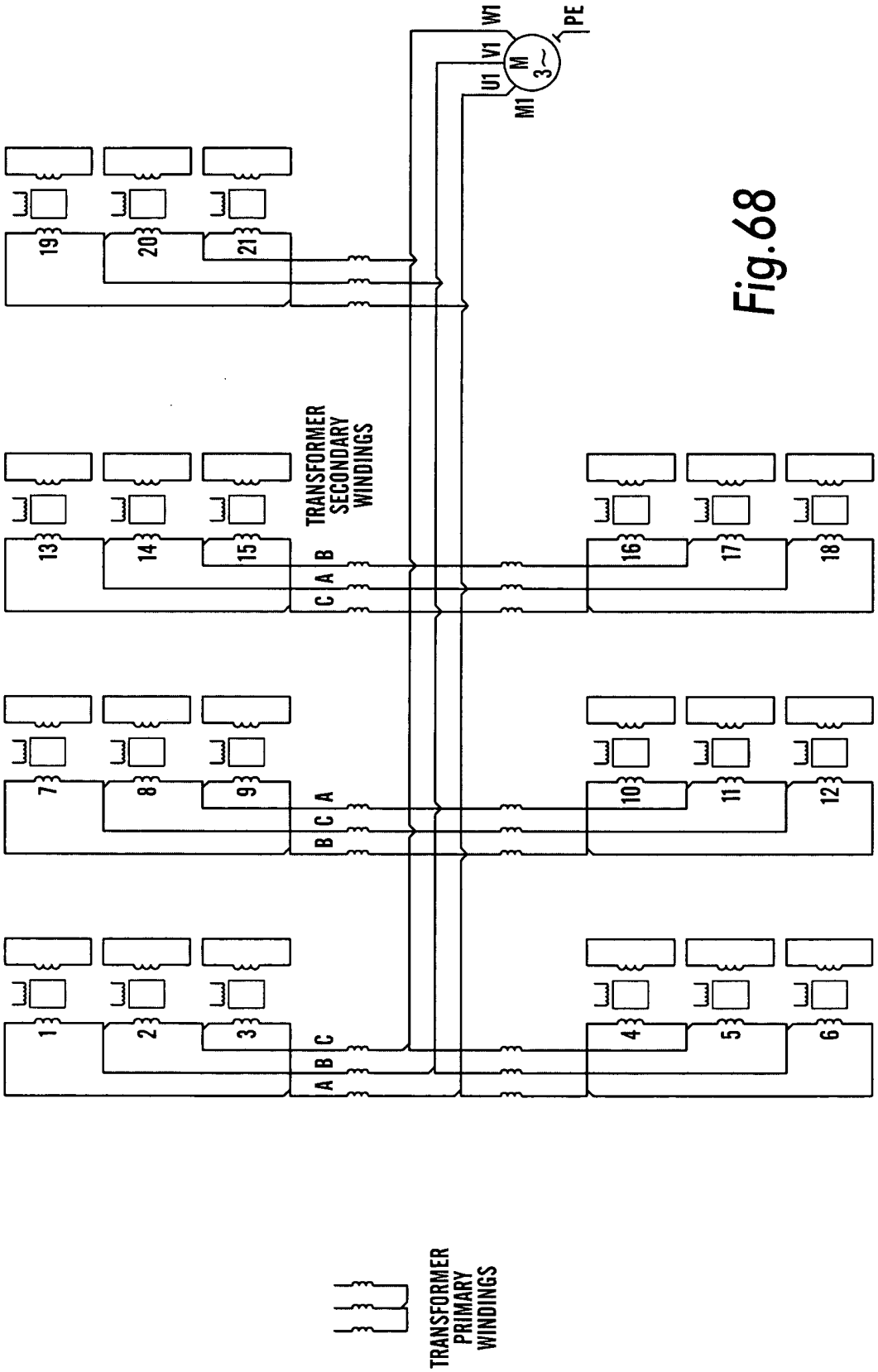
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V1
U1
M1
M
3~
PE
19
20
21
TRANSFORMER SECONDARY WINDINGS
13
14
15
16
17
18
C A B
7
8
9
10
11
12
B C A
1
2
3
4
5
6
A B C
TRANSFORMER PRIMARY WINDINGS

Fig.68

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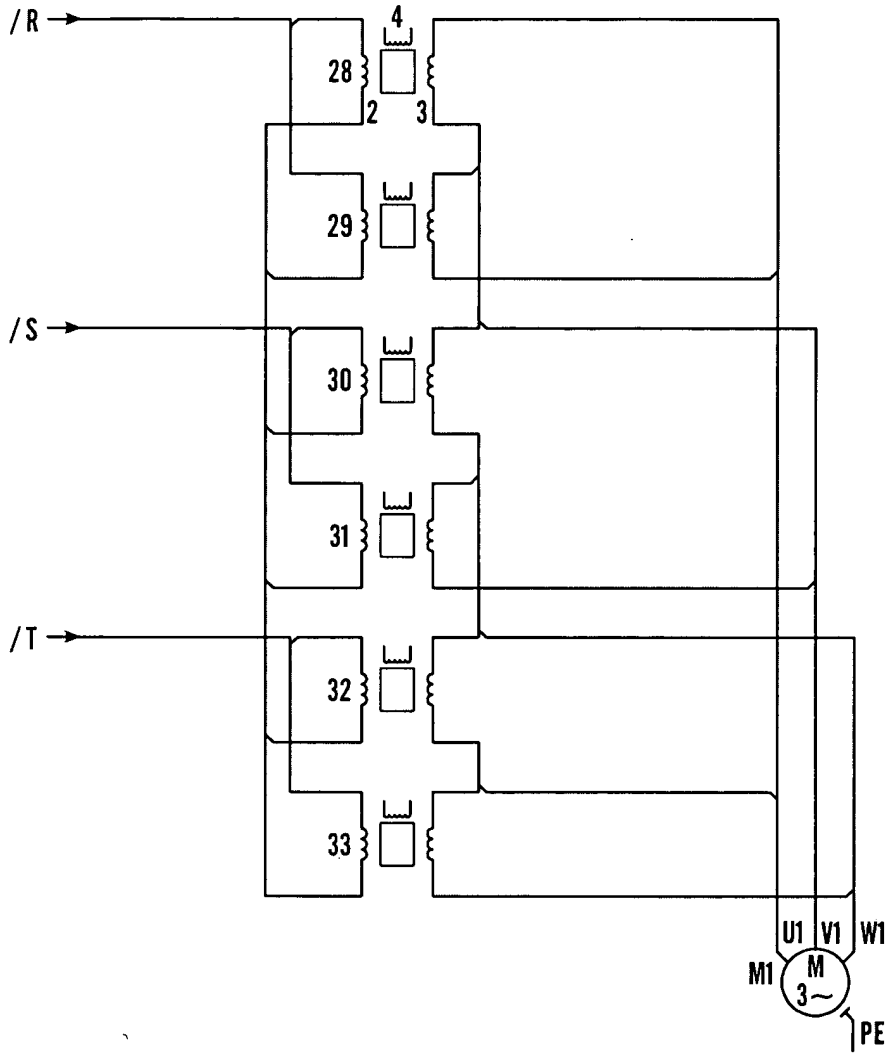

Fig.69

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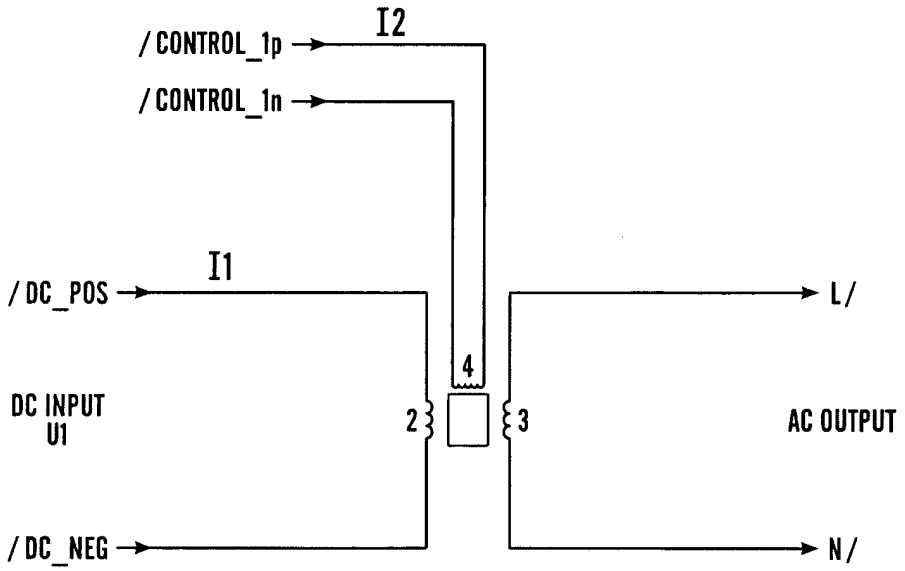


Fig.70

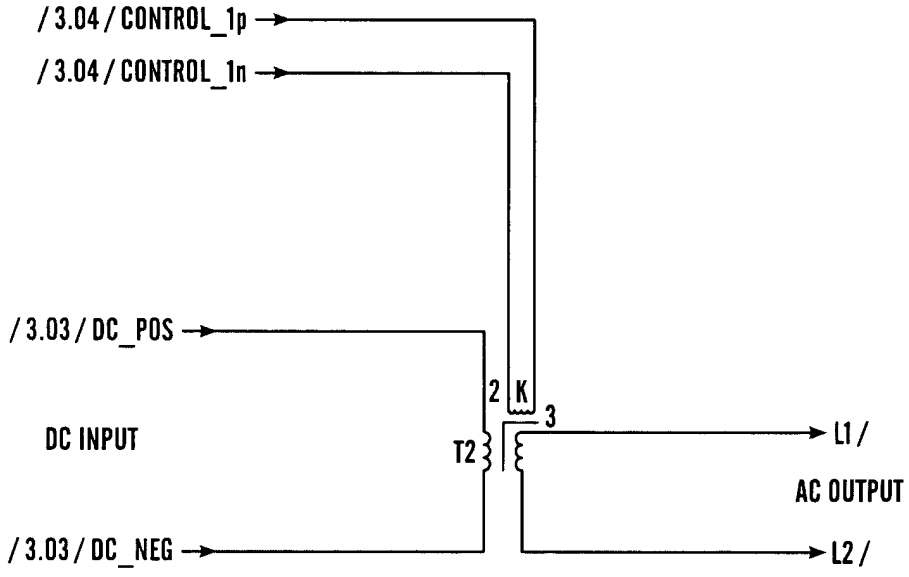
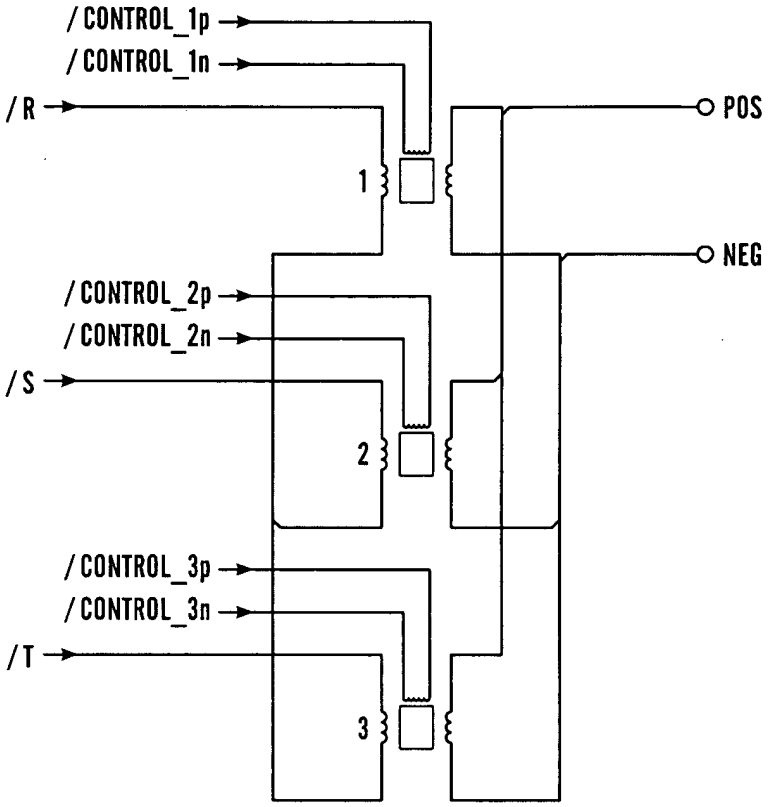


Fig.70a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3

Fig.71

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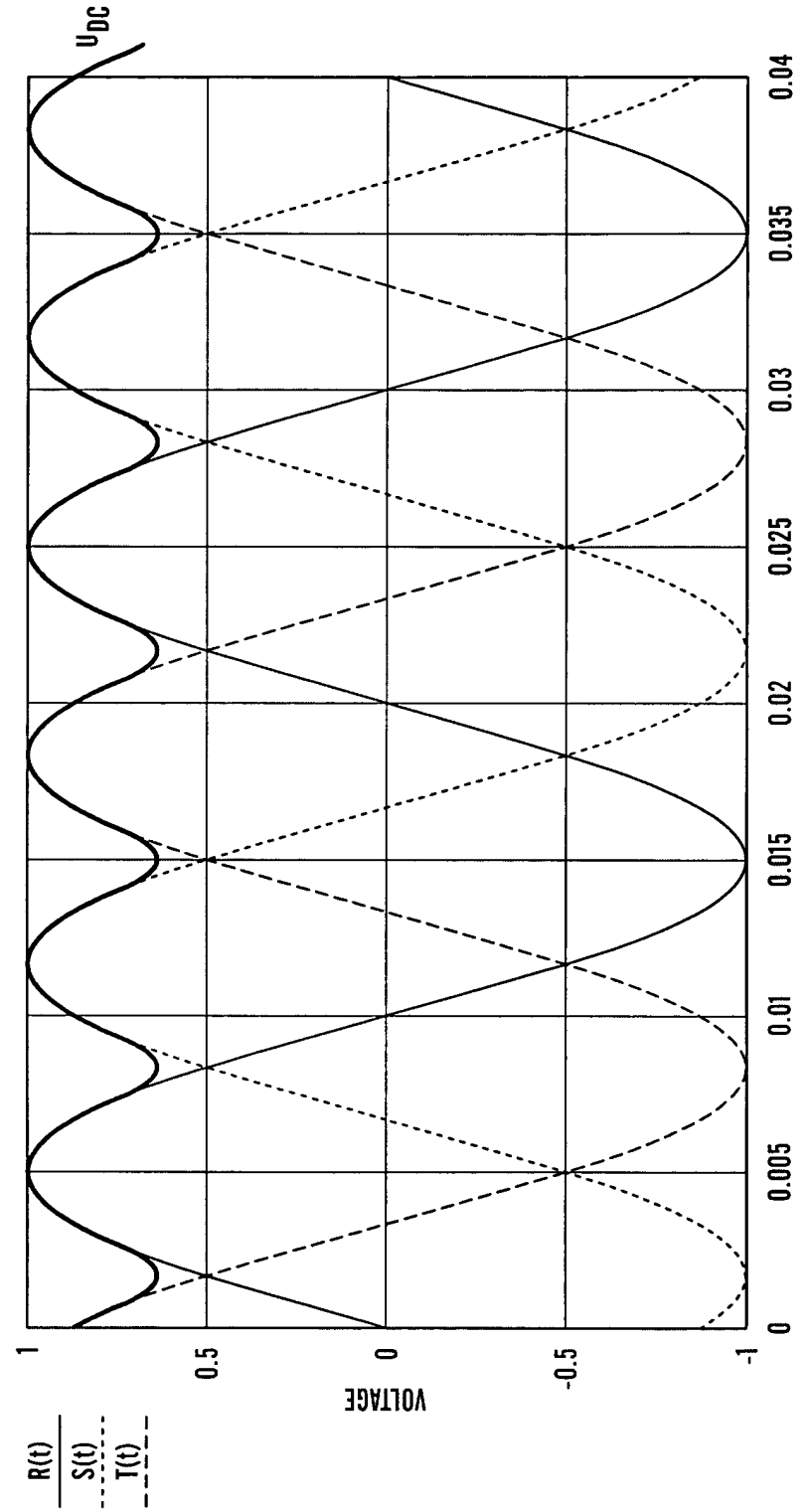
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-1
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0.01
0.015
0.02
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0.035
0.04
TIME
TRACE 1
TRACE 2
TRACE 3
R(t)
S(t)
T(t)

Fig.71a

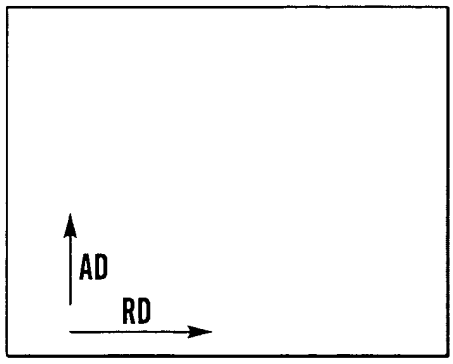

Fig.72

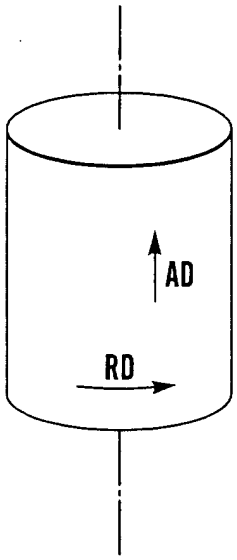

Fig.73

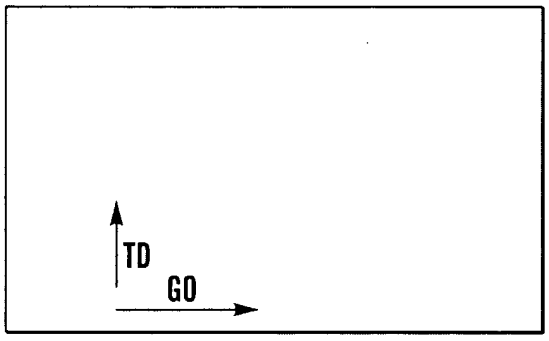

Fig.74

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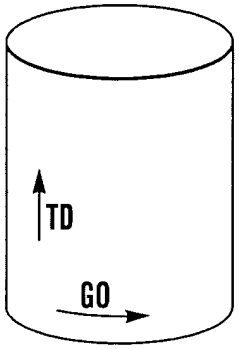

Fig.75

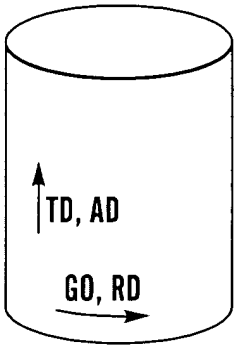

Fig.76

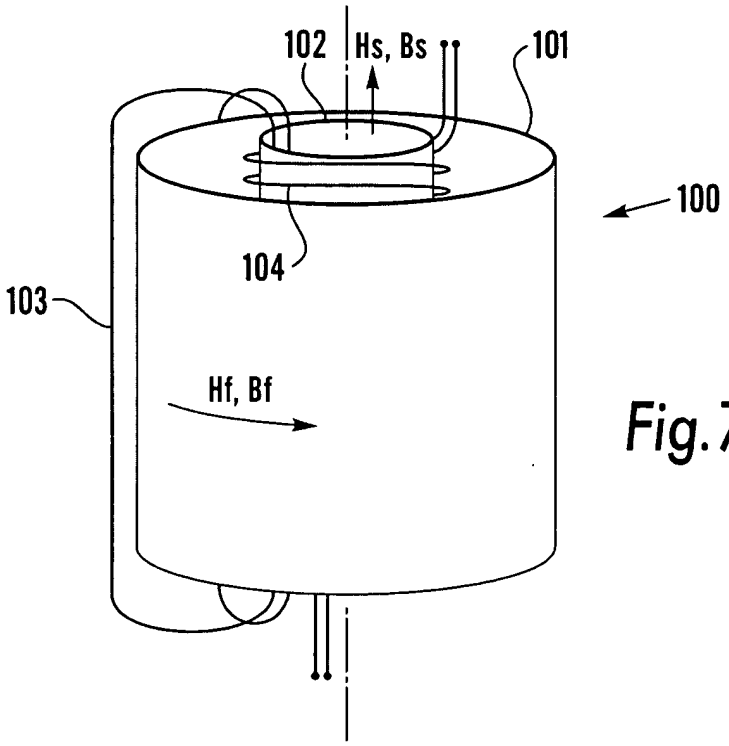

Fig.77

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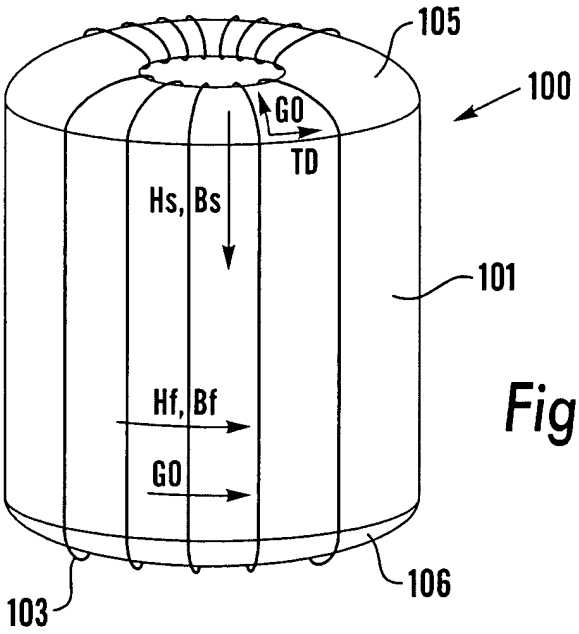

Fig.78

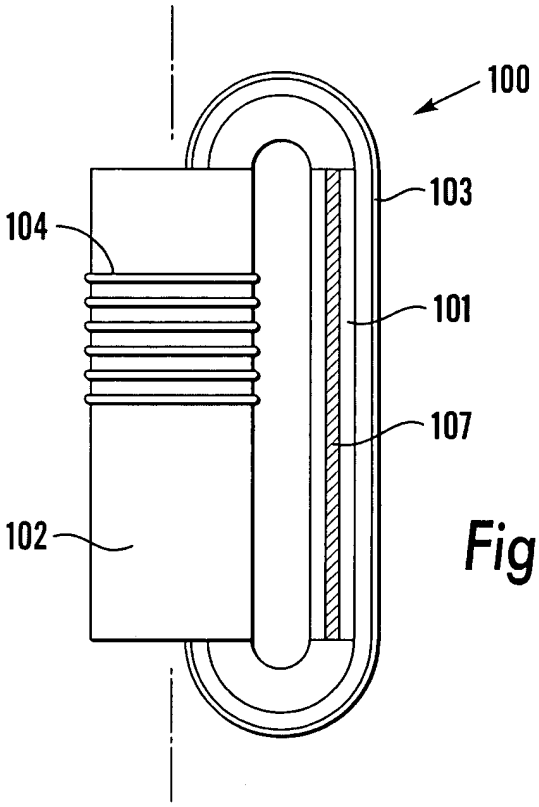

Fig.79

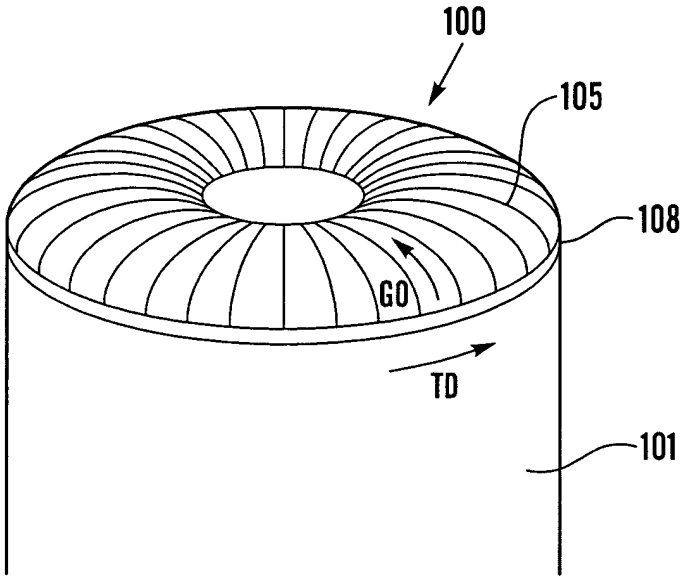

Fig.80

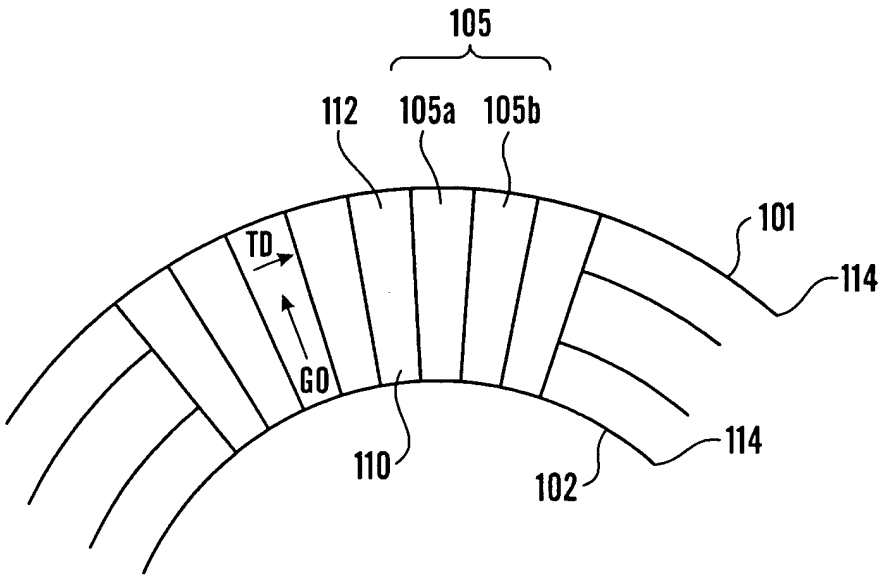

Fig.81

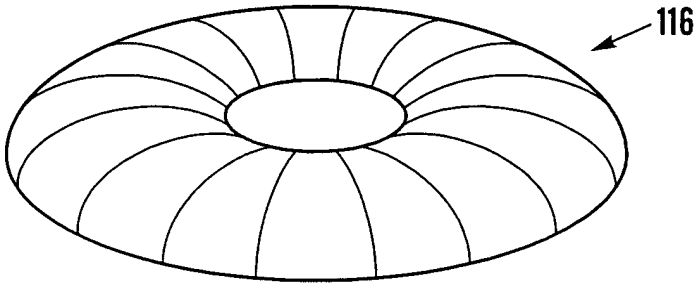

Fig.82

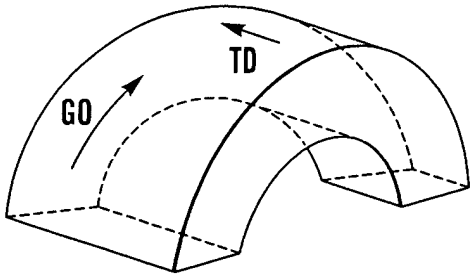

Fig.84

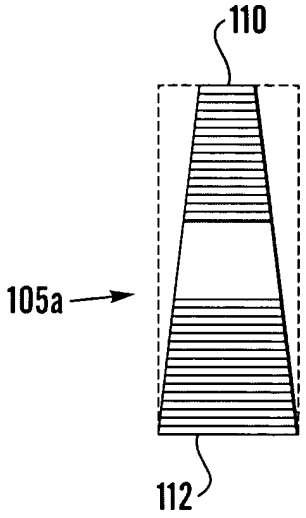

Fig.85

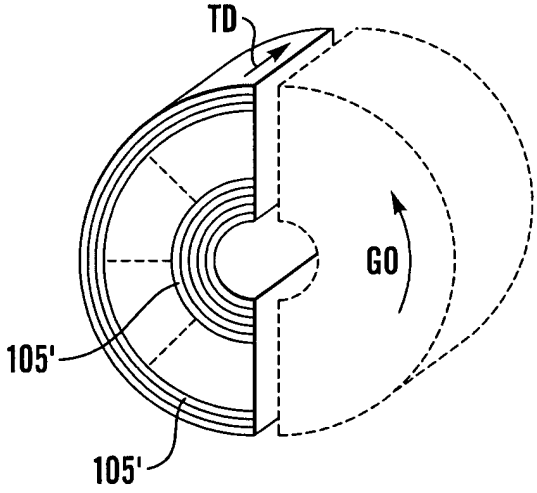

Fig.83

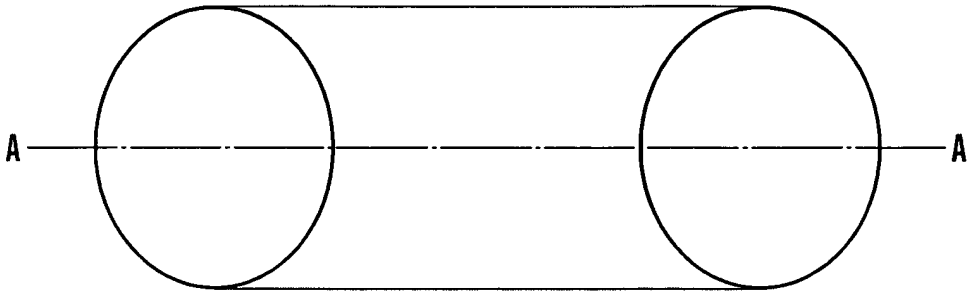

Fig.86

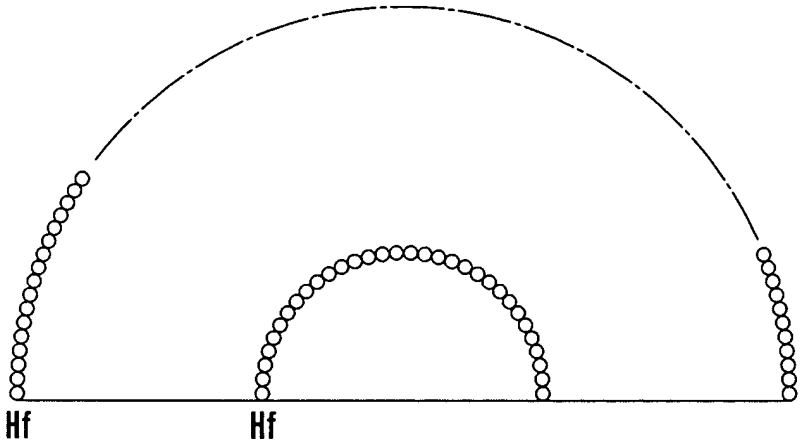

Fig.87

A-A

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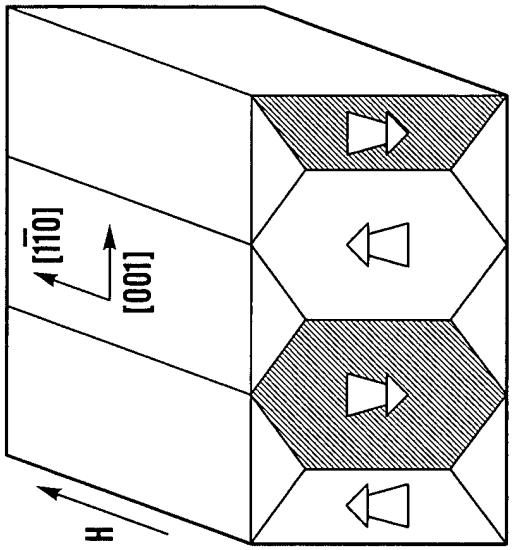

Fig.88b

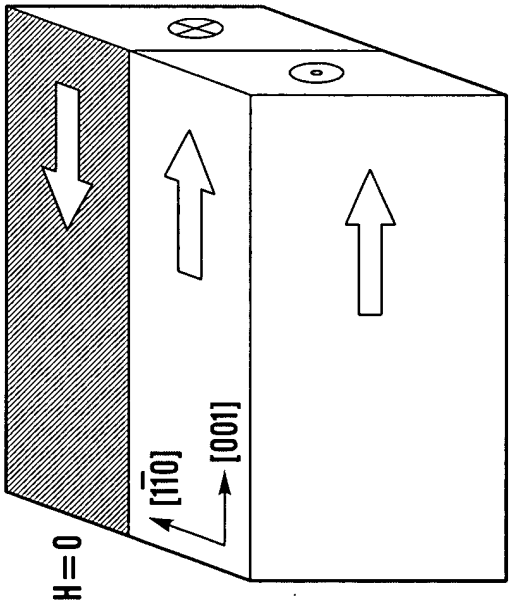

Fig.88a